

MORTUARY VARIABILITY ON THE LATE PREHISTORIC SOUTHERN PLAINS

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The following faculty members have examined the final copy of this thesis for form and content, and recommend that it be accepted in partial fulfillment of the requirement for the degree of Master of Arts, with a major in Anthropology.

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DEDICATION

To my Mother, who has always been my hero.

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ABSTRACT

The Prehistoric Southern Plains has been subject of a large amount of archaeological investigation. Several groups of similar semi-sedentary people flourished from 1000 to 1500 AD. These groups employed a hybrid economy of hunting and gathering with varying levels of supplementary agricultural activities. One avenue of investigation that has not had widespread implementation is bioarchaeological and mortuary studies. Investigations of such data generally only included descriptions and discussion of single sites. This has been primarily due to problems in sample size of well documented skeletal collections as compared to other regions. The purpose of this paper is a presentation of mortuary data from five cultures spanning this time period on the southern plains. Mortuary data on associated funerary objects, grave deposition, position, orientation, location, and facility from the Antelope Creek Phase, Buried City Complex, and Henrietta Complex in Texas and the Washita River Phase and Zimms Complex in Oklahoma is presented in this thesis. Additionally a brief discussion of what this limited sample can tell us is presented.

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CHAPTER ONE

INTRODUCTION

The late prehistoric Southern Plains has been the subject of much archaeological investigation. The one line of evidence that has not been as fully incorporated into research designs is mortuary data. Examination of mortuary practices has mainly been restricted to single, large sites (Lopez 1970) or to general summaries of data with brief discussions (Lintz 1986; Summers 1997). No large scale studies within or between Southern Plains groups has been conducted on mortuary phenomena. This leads to a gap in our knowledge of these groups as mortuary data can be used to give insight into the structure of social and political systems of a society. Mortuary studies have demonstrated a correlation between ones treatment in death and their status in life (Binford 1972; O'Shea 1984). The study of burials not only reveals biological data on the dead buried, but also the process of burying the dead. The dead do not bury themselves, so rather archaeological study reveals the mortuary practices of the living and the relationship of the living to the deceased individual (Pearson 1999). Through these relationships it is possible to reconstruct social dimensions of populations where no historical or written records exist (O'Shea 1984).

One of the primary reasons for the lack of comprehensive mortuary research on Southern Plains groups is a lack of a large amount of well documented graves in the region as well as incomplete nature of data reporting for several sites (Owsley et al. 1989; Owsley 1989). Other sites, such as the Footprint site, suffer from deficiencies in excavation methods. Burials were not a primary concern and context was often lost.

The purpose of this thesis is the collection and presentation of burial data from five contemporary groups that share the same general lifeway. Additionally this study will examine the distribution of grave goods among age and sex classes. Finally, the place of the Footprint site will be examined in the perspective of the greater antelope creek phase mortuary pattern.

The late prehistoric Southern Plains was home to several cultures that were distinct, but shared a general way of life that distinguished them from groups in adjacent regions (Brooks 1994). These plains villagers started to appear on the Southern Plains around 800 A.D. and lasted to approximately 1500 A.D. (Wedel 1959). The primary characteristics that distinguishes them is their emphasis on the utilization of Bison that was complemented by hunting of smaller game, gathering of local wild plants, and growing of crops such as corn and beans. They were also active to varying degrees in trade with each other and with adjacent groups.

Sites for these groups are found along major streams and tributaries of major rivers that contained soils favorable for growing crops. Settlements generally consisted of several smaller sites in close proximity or a larger central community site with several homestead sites scattered up and down the river valley (Brooks 1994). These sites are generally characterized by the presence of house structures, storage and refuse pits, middens, and occasionally burials and/or cemetery areas. Very little is known of the social structure and organization of these groups but they are thought to be egalitarian with some signs of ranking (Lopez 1970; Lintz 1986; Brooks 1994). Additionally, while it is recognized that these groups share many cultural traits in material culture and

economy, it is not known as to the extent of the relationships between these groups or the nature of those relationships.

This topic has been examined using archaeological evidence of variation in material culture, settlement patterns, architecture, and subsistence but not of mortuary practices and what they can reveal about a population. The presentation and discussion of mortuary data in this study will attempt to provide a beginning to a greater comparative examination to gain a greater understanding of Southern Plains Villagers in the future. The study will include five Southern Plains groups that were active during the late prehistoric. These groups include the Antelope Creek phase, the Washita River phase, the Buried City complex, the Zimms complex, and the Henrietta complex.

The second chapter of this thesis presents the archaeological background of the five Southern Plains late prehistoric cultural groups. A general history of excavations as well as general characteristics of each group is presented. The sites in the sample will then be presented and the sample of burials they contain. Lastly, previous studies of mortuary practices on the late prehistoric Southern Plains are discussed and a brief discussion of the value of mortuary studies and what they can contribute to the knowledge base of a prehistoric population.

The third chapter will start with the methods of data collection and the sources will be presented. The methods of analysis for discussion of burial practices will be presented. The methods of creation of age and sex classes as well as the burial positions, burial compositions, types of grave goods present, number of individuals, and location of graves will be described. How these categories will be used in the discussion will be presented. The results of the summary statistics from the samples for each of

the Southern Plains groups will be presented in chapter four. Each site will be presented separately then each cultural group as a whole. The distribution of grave goods by artifact type across age and sex classes will be presented, as well as summary statistics of characteristics of the grave itself. These characteristics include: the size and dimension of the grave, orientation of the grave, the number of individuals interred, and the location of the grave in the site.

The final chapter will contain a discussion of these results and of the patterns that emerge in each group and the variability observed. From these patterns there will be a tentative discussion of what they reveal about the social structure of the living populations represented. It will examine evidence of social ranking in these populations. The patterns that emerge will then be compared cross culturally to contribute to the discussion of the question of how these cultures relate to each other. The place of footprint within the antelope creek phase will be examined. This is a part of Collaborative research with Dr. Peer Moore-Jansen on the role of the Footprint site in the Southern Plains; including interpretation of the site in the context of a broader set of sites (Antelope Creek Phase) and in a broader regional perspective. The constraints and limitations of the sample will be discussed in some detail. Finally, this chapter will discuss future avenues of research that can expand our knowledge of mortuary practices in the late prehistoric Southern Plains.

CHAPTER TWO

ARCHAEOLOGICAL BACKGROUND

Villages of hunting and farming people started to establish themselves on the Southern Plains around 800 A.D. (Wedel 1959). Their settlements have been found by archaeologists primarily along major stream drainages in Oklahoma and Texas (figure 1) where the fertile floodplain soils were favorable for the development of simple farming economies (Brooks 1994). This was supplemented by hunting, mainly of bison, and the collection of local wild plants. This mixed economy was reliable and allowed for these societies to develop and flourish on the Southern Plains. This thesis examines some of the later groups in this region and encompasses the period of 1200 to 1500 A.D.

Antelope Creek Phase

The range for the Antelope Creek phase is located in the panhandles of Texas and Oklahoma. This group has been the subject of much investigation and speculation due to the mix of plains material culture and the use of masonry in architecture which is reminiscent of the puebloan cultures to the Southwest.

The earliest scientific investigation of a ruin was T.L. Everly in 1907 at the Buried City (Handley ruins). Though now the site is recognized as being part of a separate cultural manifestation, he was the first to note the vertically oriented stone slabs used in foundations of structures (Everly 1907). These ruins prompted Warren K. Moorehead to start a survey and testing program in the Texas panhandle (Lintz 1986:6). This survey of Wolf Creek and the Canadian River Valley went on in 1919 and 1920. This survey

located over 100 sites and he tested and briefly excavated several of these (Moorehead 1921, 1931). In his speculations he was the first to correctly conclude that the remains

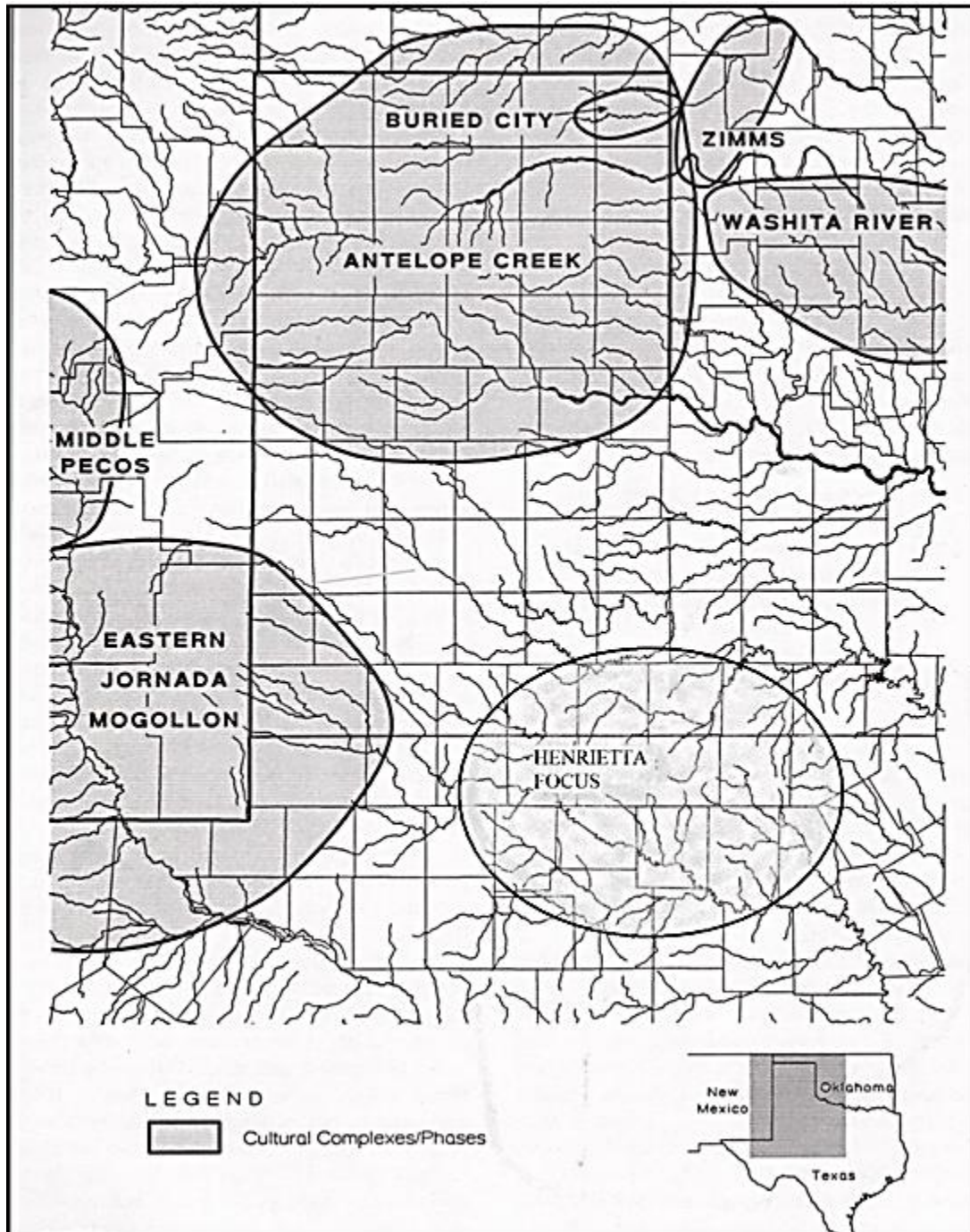


Figure 1: Southern Plains Cultural Complexes (modified from Boyd 1997).

were not Mississippian or Puebloan. He instead attributed the manifestation as a Plains group that changed as it spread up the Canadian River and referred to this group as the Panhandle Culture (Moorehead 1921:11).

William Holden and his students conducted extensive test excavations at some of the larger ruins such as Tarbox ruin (1929), Antelope Creek 22 ruin (1930), and Saddleback ruin (1932, 1933). One of T.L. Everly's students, Floyd Studer became massively involved in panhandle archaeology for many years. In his time he identified 110 sites (Studer 1931a, 1931b). He also initiated and directed excavations at Alibates 28 and Coetas ruin (Studer 1934), as well as many other sites along Alibates and Antelope Creeks (Lintz 1986:11). Alex Krieger (1946) later published a comprehensive work that synthesized much of the previous work in the panhandle where he defined the cultural group into a more formal designation using the Midwestern Taxonomic System (Mckern 1939) and defined this set of ruins into the Antelope Creek focus (1946). Other Excavations such as Works Progress Administration (WPA) projects (Baker and Baker 1941) and for the Sanford Reservoir (Green 1986) contributed to a greater understanding of the culture. After more excavations were undertaken and the culture more clearly refined Lintz in his 1986 dissertation redefined the focus into the Antelope Creek phase.

Antelope Creek Sample Sites

Six sites were sampled from the Antelope Creek Phase. Data was gained from published and unpublished sources as well as files from the Panhandle Plains Historical Museum.

The Blue Creek This burial site (LMRA 242) was excavated by the Texas Archaeological Society Field School in 1969. This project covered three sites that were villages and one cemetery site, LMRA 242 in Moore County. LMRA 242 is situated on the northern flank of a gently sloping plain that leads to the bluffs overlooking Blue Creek. LMRA 242 is not immediately adjacent to a village but is within easy walking distance to the nearby habitation sites. The recovery of the burials was supervised by Cecil Calhoun. Additional remains were donated by private donors. Information on the burials recovered is reported in Couzzourt and Couzzourt (1996), and the files of the Panhandle Plains Historical Museum such as osteological reports and NAGPRA notes by A.J. Taylor. Six burials were recovered from this site.

The Alibates 28 site (41-PT-11) is a village site that is located in close proximity to the Alibates Flint Quarries. The site occurs just above the rim of the inner valley in Potter County Texas. It is one of the largest sites near the quarries and was used as one of the type sites in Alex Krieger's definition of the Antelope Creek Focus (1946). This site has been one of the most visited, tested, and excavated sites in the Antelope Creek Phase.

Floyd Studer was the first to initiate excavations at the site in 1926. Other excavations conducted were by E.B. Sayles in 1932, J. Alden Mason in 1929, and Ronald Olson in 1929 (Lintz 1986). The primary excavation of this site was a WPA excavation that was led by Baker and Baker and is reported in 1941. This report as well as files at the Panhandle Plains Historical Museum was used in collecting data. Eighteen burials were reported at this site. However, only the 14 from Baker and Baker's excavation were suitable for this report. Four other individuals were also

reported from this site but their location, as well as description of the burials was lacking and osteological material was very fragmentary.

The Antelope Creek Site is divided into two sections, Antelope Creek 22 (41-HC-23) and Antelope Creek 22A (41-HC-24). The site is located in Hutchinson County in Texas. Antelope Creek 22 consists of a large contiguous room structure located on a high bench on the West side of Antelope Creek, 22m above the valley floor and 45m below the outer valley floor. This site was the other site used as the two type sites used by Krieger to define the Antelope Creek Focus (1946). This site also underwent extensive investigation with excavations conducted by William Holden (1930), Warren Moorehead (1931), Lowrey (1932), and the WPA (Baker and Baker 1941). Antelope Creek 22A (41-HC-24) consists of a series of small rooms at the base of the bluff 45m East of Antelope Creek 22. Excavations were conducted in 1939 by the WPA crews led by Baker and Baker (1941). Burial data was collected from Baker and Baker's final report (1941) as well as osteology reports from the Panhandle Plains Historical Museum where age and sex estimations differed. Additional information was obtained from unpublished quarterly reports (1939) on burials that were not in the final report. 18 burials from these sites will be used in this study. 24 individuals have been noted as being recovered from the site but six of the burials had little to no exact information on them.

The Footprint Site (41-PT-25) lies on a small isolated knoll top at the eastern end of Big Canyon in Potter County in Texas. The site consists of three isolated room structures. In 1968 F.E. Green led excavations as part of the Sanford Reservoir Project. All of the burials were found in Room 1. The remains consist of 21 individuals in three

ossuary pits, a pit containing ten skulls, and scattered remains around the room. However, several key field observations were missed during recovery and the bones have been comingled and provenance lost. Despite this extensive analysis of the skeletal collection has been conducted. Analysis by D.K. Patterson in 1975 of the skeletal material and D.E. Patterson of the teeth were the initial reports done on these remains. Due to the loss of provenance the exact number of individuals remains unclear. D.K. Patterson suggested 32 individuals. Reexamination by Moore-Jansen et. al. (2011) has suggested 34 individuals and 9 “unaffiliated individuals”. Due to this the remains as used in this report will follow the basic descriptions by F.E. Green in his 1967 report. Since as of this writing the individuals identified have not been reconciled this report will group the individuals by pit found.

The Fred Loomis Site. (34-WD-12) is a small group of burials situated on a hill overlooking Doe Creek in Woodward County in Western Oklahoma. The site is located nearby to the remains of a large village site. The site was excavated by the Kay County Chapter of the Oklahoma Anthropological Society in 1962 after reports of local residents destroying burials. Several bones were on the surface or collected from local residents. 10 burials were recovered from the site and the remains were given to Alice Brues for analysis. Data was gathered from the report in 1963 that contained the site report and burial descriptions as well an appendix that contained the results of Alice Brues analysis.

The Coetas Ruin (41-PT-2) is located on a secluded bench along the western part of the inner valley wall on Coetas Creek in Potter County Texas. This site has extensive ruins and was excavated by Floyd Studer in 1932 and 1934. Only a small

amount of the extensive excavations were reported in the 1934 summary by Studer. In this two burials were recovered and described. Both of these burials will be used in the sample.

Antelope Creek Traits

Antelope Creek sites can be mostly found between the Canadian and Arkansas River drainages. The temporal range has been defined as 1200 to 1500 A.D. by Lintz who presented over 50 radiocarbon dates for the phase (1986). Sites are mostly located on steep terraces, elevated knolls in the floodplain or mesa tops off of the principle tributary streams rather than the Canadian and North Canadian Rivers themselves (Brooks 2004). These settlements are mostly distinguished by the use of stone slab masonry in the construction of structures and storage facilities. Stone slabs were placed vertically in one or two rows to form a wall and held in place by adobe. These structures can range from single, isolated houses to multi-room, contiguous structures where multiple families can live (Lintz 1986). Lintz identified 11 unit types of structures in his analysis of Antelope Creek settlement patterns (see appendix A). Sites vary and consist of temporary camps, isolated homesteads, hamlets, and larger villages (Lintz 1986). Settlements vary in that there are widely spaced single dwelling structures along streams as well as large compound room structures such as at Antelope Creek 22 that had upwards of thirty rooms. Residential rooms are semi-subterranean and can feature a passageway entrance, a depressed central floor channel, four central support posts, a central hearth, benches, floor pits, and sometimes an “altar” on the back wall opposite the entryway (Lintz 1986). A reorganization of settlement patterns has been

observed in Antelope Creek, and such Lintz sub divided the phase into early and late sub phases. The early sub phase emphasized the aggregate type of room units. Starting around 1350 A.D. single, larger, rooms were favored over the larger aggregate types (Lintz 1986).

Artifacts recovered from Antelope Creek sites are typically representative of Plains Village societies in the late prehistoric (Brooks 2004). Stone artifacts are made mostly from Alibates flint that is found in the panhandle, just north of Amarillo, Texas. Obsidian from New Mexico is also found (Brosowske 2004). Tools made from chipped stone typically can include: Un-notched and side notched triangular form projectile points (Fresno, Harrell, Washita types), end and side scrapers. Knives occur in several forms, with ovate and narrow curved forms, with the alternately beveled, diamond form being predominate. Drills occur in simple pin shape, T shape, and flake forms. Ground stone was used to make artifacts such as grinding basins, manos, abraders, hammer stones, ornaments, pipes, and celts. Implements of bone made from deer and bison were also manufactured. Bison scapula hoes, bison digging stick tips, scapula knives, beamers, rasps, hide grainers, arrow shaft wrenches, awls, antler tapping tools, spatulas, and tubular bone beads were among the bone tools made. Mussel shell was also used to make scrapers, spoons, and shredders. Shells were also made into pendants or disk beads. Shells such as Olivella and conch shells were imported and used for ornamentation.

Clay was used predominantly in pottery manufacture; but perforated disks, tubular pipes, and beads are also reported. Pottery in Antelope Creek is mainly represented by two types: Borger Cordmarked and Stamper Cordmarked. Vessels are

most commonly a globular jar form with cord marking on the bodies. Temper is generally crushed rock or sand. Decorations are rare. Pottery from the Southwest has also been found at many Antelope Creek sites.

The artifact assemblage is representative of an economy that relied on the hunting of bison, but also exploited local resources. Also farming activities are noted but the extent of which has been debated (Boyd 2008). The presence of goods from outside areas is also evidence that Antelope Creek was active in trade with adjacent areas. Lintz (1986) has speculated that the amount of work required to build the larger sites could possibly be indicative of organization at the community level.

Washita River Phase

Sites that are identified as belonging to the Washita River phase are principally located in the central and west central section of Oklahoma, mostly along the Washita River and its tributaries. This main area of occupation falls into two physiographic regions, the western sandstone hills and the central red bed plains (Bell 1984). This groups temporal range is from 1200 to 1450 A.D (Brooks 1987; Drass and Swenson 1986). The Washita River phase is well documented, with the number of sites being identified in excess of 200 (Bell 1984; Brooks 1987; Drass et al. 1987; Hofman 1978; Pillaert 1963; Richards 1971; Shaeffer 1966; Sharrock 1961)

Bell and Baerreis (1951) initially defined the culture as the Washita River focus based on evidence gathered by early WPA and University of Oklahoma excavations in the central and western Washita River drainages (Drass 1999). Later the focus was redefined into a phase by Hofman (1978). After more comprehensive work in central

Oklahoma Drass has proposed that that the phase be sub divided into two phases: the eastern Washita River phase and the western Turkey Creek phase (Drass 1997; 1999). These two and the groups that preceded them, the Paoli and Custer phases he grouped into the Red Bed Plains variant due to their interrelationship of these cultures, especially when compared to groups in adjacent regions (Drass 1999). For the purpose of this thesis, sites that encompass the Washita River drainages in central and west central Oklahoma will be considered together.

Washita River Sample Sites

Three sites were sampled from the Washita River Phase. All data was gathered from published material.

The McLemore Site. (34-WA-4) is located in Washita County in western Oklahoma. It lies on the North bank of Cobb Creek. This site consists of a village site and an adjacent cemetery area. Excavations were conducted in 1960 under the supervision of Robert E. Bell. Summary of these excavations were reported by Pillaert in 1963. This report was used for information pertaining to the graves. Skeletal material was given to Alice Brues for analysis and her 1963 report was used for the biological profiles of the individuals recovered. This site represents the largest skeletal sample for the late prehistoric plains villager populations. 52 individuals were recovered were recovered from 48 burials. The mortuary behavior observed at the site was analyzed by Lopez in 1970.

The Grant Site (34-GV-2) is located in Garvin County on the first terrace above the Washita River just west of the town of Wynnewood in Oklahoma. Excavations were

carried out in the summer of 1937 as a WPA project that was overseen by Lynn Howard. The excavation was reported by Sharrock (1961). The site was quickly eroding due to the Washita River cutting a new channel and the remains of the site were being washed away. The site consists of three rock lined fire pits, 29, cache pits, 9 midden areas and some concentrations of post holes that are suggestive of houses. The burial area was a small area about 20 feet square between the river and the site. There were 10 burials recovered (three were rodent burials), leaving 7 human burials that were recovered. Many of the burials were in the flood plain and had to be recovered when the river was at low stage. Burial 1 was eroding out of the river bank when discovered and the bones below the knees were missing. In addition to the excavated individuals, skeletal material was recovered from the flood plain surface that consisted of the remains of at least seven adults of both sexes. Only the excavated individuals will be used for the purpose of this study. Burial data was rather limited for these burials.

The Heerwald Site (34-CU-27) is located along the South bank of Turkey Creek. It lies on gently sloping ground on the side of a range of sandstone hills. In 1957 the site was excavated as part of the Oklahoma salvage project. The site consists of a house with associated pits and evidence of other house structures. It is thought that the complete site consists of up to 30 structures. The results of this salvage excavation were reported by Shaeffer (1965). The burials from this site were described in this report and consist of three individuals from one grave.

Washita River Phase Traits

Sites of the Washita River phase are found in Garvin, Grady, Caddo, Custer, Washita, and Roger Mills counties in Oklahoma. Settlements consist of small villages of five to twenty houses (Brooks 1994; Drass 1999). These villages are spread along the Washita River and are between 2.4 to 3.2 kilometers apart on terraces or ridge toes. Villages include wattle and daub constructed houses, sheet middens, house middens, storage and refuse pits, and sometimes cemeteries. The sites are numerous, and contemporaneous which is suggestive of a densely populated community (Bell 1984). Subsistence consisted of hunting and farming, with variation in the emphasis of these two activities. Settlements on the eastern margin of the phase emphasized farming, while the western sites were seemingly more reliant on hunting (Brooks 1994).

House structures found at sites are square and rectangular in form and are constructed of wattle and daub with wooden wall posts (Brooks 1987). The interior of these houses consisted of two central roof support posts, small internal posts, a central hearth, and often a storage pit (Bell 1984; Brooks 1987). Outside pits that consist of storage pits, trash pits, and outside hearths are also common (Drass 1999).

The artifact assemblage is typical of Plains Village cultures. Chip stone artifacts include projectile points of the side and un notched variety (Harrell, Washita, Huffaker, and Fresno types). Scraper forms vary and come in end, side, pointed and flake forms. Knives are found in ovate and diamond beveled forms. Drills and perforators are also common. The stone used to manufacture these tools comes from local river and upland gravel but Florence A chert from North Central Oklahoma and Alibates chert from Texas

is also found. Ground stone implements include pipes, celts, arrow shaft smoothers, abraders, nutates, milling basins, mortars, manos, and hammerstones.

Bone tools are commonly found and are made most frequently from bison and deer. Bison Scapulae and skulls were used to make hoes and scoops. Bison Tibia digging stick tips, ulna picks, and chisel shaped tools are present. Bone awls are a common tool found and come in a variety of forms. Deer mandible sickles, arrow shaft wrenches, beamers, knives, and rasps also occur. Mussel shell was exploited and frequently found. Shell was used as a temper for pottery as well as being made into scoops and scrapers. Shell was also used in decoration in the form of beads, disks, and pendants. Olivella shells were also found and were used as beads.

Clay was used in house construction and sometimes to line storage pits. Figurines, in the human form have been occasionally found. Other items of clay include perforated disks, pipes, and cups. Washita River phase pottery typically is plain surfaced or cord marked. Types most common at Eastern sites are Nocona Plain, Lee Plain, and Lindsay Cord marked while Stafford Plain and Stafford Cord marked are the more common types in western sites (Brooks 1994). Vessel shape is most commonly globular or vase shaped, but bowls and bottles have been recovered. Temper materials include shell, caliche, crushed rock, sand, and bone. Decorations are rare. Some trade ware is found, such as a human effigy bowl (Pillaert 1963), that are from the Caddoan area to the East.

The Washita River phase is varied in its economy with differing emphasis placed on hunting or farming. Overall the Washita River people relied on this mixed economy that was stable and allowed for a dense population. Bell (1984) has suggested that the

large amount of people as well as interaction with the rank-level Caddoan societies to the East would have necessitated greater sociopolitical organization.

Buried City Complex

The Buried City Complex is a cultural manifestation that is found along Wolf Creek in Ochiltree County in the Northeast corner of the Texas Panhandle. The complex may also extend into Ellis County in Western Oklahoma (Drass and Turner 1989). Excavations at Handley ruins by Everly (1912) and Moorehead (1931) led to the complex initially classified as a part of the Antelope Creek phase. Additional work has led to Hughes as defining the site and several surrounding it as a distinct cultural expression (Hughes 1986). Radiocarbon dates place the temporal range of the complex between 1150 and 1350 A.D. (Hughes and Hughes-Jones 1987). Settlements of Buried City consist of hamlets and villages that have groups or single room houses built in groups on high terraces, knolls, or bluffs near Wolf Creek. Site density is high and is greater than that of neighboring Antelope Creek (Hughes 1991).

Buried City Complex Sample Sites

Six sites comprise the sample representing the Buried City complex. Data was gathered from published sources, as well as unpublished files from the Panhandle Plains Historical Museum.

The Matthew's Ranch Site (PPHM A546) is located in Hansford County, Texas on a ridge. Excavations at the site were initiated by Panhandle Plains Historical Museum staff after reports of widespread looting and destruction of burials at the site.

Jack Hughes arrived to document as much as he could in the midst of the digging going on by local residents. During his investigation he recovered several individuals from the surface and excavated a few more. In all he noted that 11 or more burials were taken from the site. Nine individuals were reported in the PPHM files. Data was gathered from the field notes of Jack Hughes (1962) and records on file at the PPHM.

A180 Burial Cave. This site is located in Randal County, Texas. This site lies in a deposit of burnt rock and charcoal under a small rock overhang on the south side of Palo Duro Canyon. Jack Hughes and two students investigated the site after it was discovered in 1955. Field notes indicate that several burials were recovered during this process. PPHM files indicate that 9 individuals were identified during the 1995 inventory (Summers 1997).

A227. This site is designated as 41-RB-21. This site is located in Randal County, Texas on privately owned land. A227 was excavated in 1957 by Jack Hughes, William Rivers, and Warren Rivers. All data was gathered from the field notes of Jack Hughes (1957) and PPHM records. 15 individuals were reported as being recovered from ten graves.

Courson B. This site is designated as 41-OC-27. Courson B is located in Ochiltree County near Wolf Creek on the Courson Ranch. This site is on the same ranch as the Buried City Complex. David T. Hughes was contacted to assess the scientific value of possible sites situated on the Courson Ranch. After initial excavations in 1985 the project was expanded and in 1986 the Texas Archaeological Society was invited to hold their field school at the site. This was a part of a larger Courson Archaeological Project that investigated many sites in the area. The site consists of

house structures as well as a possible pit house structure. Five burials were also recovered from this site. Data was gathered from the Report on this site (Hughes and Hughes-Jones 1986) as well as osteological analysis of the individuals recovered by Diane Dembicki (1987).

Harold's Pivot Field. This site is a part of the Buried City complex of ruins on the Courson Ranch in Ochiltree County, Texas. This site was excavated in 1990 following further investigation of the area. Following the removal of two burials the skeletal remains were examined by Peer H. Moore-Jansen at Wichita State University (1991).

Buried City. This is an extensive site that has been the subject of many investigations. Previous work on this site was extensive but details surrounding previously excavated burials are scarce and these will not be included in this study. In 1990 David T. Hughes conducted excavations at the site and removed two burials. These burials were also analyzed by Peer H. Moore-Jansen after previously assisting with examination of individuals removed at Harold's Pivot field.

Buried City Traits

Houses are similar to those of Antelope Creek with significant differences. Houses are square and use boulders of caliche instead of vertical slabs found in Antelope Creek structures. Houses are also larger and contain larger interior features such as benches and altars. Houses also have associated with them straight sided storage pits and semicircular rooms attached to the Southeast corner.

The material assemblage is similar to that of the Antelope Creek phase. A variety of stone artifacts are found. Side notched and unnotched triangular projectile points are the most common type but some corner notched forms have been recovered. The

diamond beveled knife form is typical, as are drills, scrapers, and an assortment of unifacial and bifacial tools. These tools are manufactured mostly from local stone but Alibates flint also occurs. Ground stone tools found include manos, mutates, and amazonite for pendants and inlays.

Bone tools found are similar to those found at other Plains Village cultures. They include bison scapula hoes, bison skull hoes, bison tibia digging sticks, bison scapula smoothers, deer metapodial awls, and deer mandible sickles. Local mussel shell is rare but does occur at some sites.

Along with architecture, ceramics are a distinguishing feature of the Buried City complex. Pottery are typically sand tempered with bone, shell, and clay sometimes used. The large globular jar is the most common vessel form with a rounded form also occurring. The vessels are thick and poorly fired. Decoration on vessels are common and include single, double, and triple rows of fingernail impressions on the neck, chevron designs, and crenulated rims. Applique and fillet, punctuation, incising, strap handles, and fabric and corn cob impressions are also found. This pottery style is seen as being similar to those found at Upper Republican sites in West central Kansas (Hughes 1986). It is primarily these differences in ceramics and architecture that differentiate the Buried City complex from the Antelope Creek phase.

Subsistence practices are suspected of being similar to other Plains Village groups but with a greater emphasis on hunting due to less favorable soils in the area of settlement (Brooks 1994).

Henrietta Complex

The Henrietta complex was initially defined as a focus by Krieger (1946) based on the Harrell site and other similar sites reported in the upper red and Brazos river valleys. However, due to the limited nature of understanding of this cultural manifestation it has been redefined as a complex (Brooks and Bell 1989); Prikry 1990; Drass 1998). There also is evidence of variation in the complex and this could warrant further subdivision (Brooks and Bell 1989). The complex remains one of the least understood of Plains Village cultures. The range of this manifestation appears to be along the Red river south to the upper Brazos, West to the Wichita River and East to the elm fork of the Trinity River (Brooks 1989; Krieger 1946) in North-central Texas. Major sites associated with the Henrietta complex are the Harrell, Dillard, Chicken House, Coyote, and Glass sites. The temporal range is not well established, as few radiocarbon dates are available. It is thought to be somewhere between 1200 to 1700 A.D. (Drass 1998). The artifact assemblage found at Henrietta complex sites are similar to those found at Washita River sites.

Henrietta Complex Sample Sites

Two sites are included in the Henrietta complex sample. Data was gained from the thesis of Jack Hughes (1942) as well as published sources (Martin 1994, Albrecht 1994).

Harrell Site. This site is designated as 41-YN-1. The Harrell site is located in South-Central Young County, Texas. The site lies on the Osage Plains at the junction of the Brazos and Clear Fork rivers. Excavations were conducted from 1938 to 1939 and

were supervised by George Fox. The excavations were extensive but the material went unorganized and unpublished until Jack Hughes (1942) and later Alex Krieger (1946) reexamined the material and studied the field notes. Various rock hearths, burials, and debris from plains village people were recovered from the site. 32 individuals were recovered from his site. The cemetery was located on the western edge of the ridge top among the various hearths, pits, and refuse deposits.

Dillard Site. This site is designated as 41-CO-4. The Dillard site is located on an alluvial terrace near the confluence of Fish Creek in Northwestern Cooke County and the Red River. Excavations were conducted in 1985 by Ernest R. Martin and various family, friends, and volunteers. The site consists of various hearths, post holes, and cultural debris. The findings from this work have been summarized by Martin (1994). 13 burials were recovered from the site and were examined by Fran Jaecques Albrecht and were reported in 1994.

Henrietta Complex Traits

Sites identified as belonging to the Henrietta complex are situated on terraces and uplands near major streams and vary in size from 2.5 to 30 acres (Drass 1998). Features found at village sites include houses, hearths, storage pits, and burials. Very few houses have been excavated but they have been exposed at the Glass, Dillard, and Chicken House sites. They are oval in shape and are 21 to 31 feet long and 16 to 20 feet wide with wooden wall posts and four major interior roof supports (Lorrain 1967). Interior features such as rock hearths and cache pits have been documented.

Stone and bone tools found at Henrietta sites are typical of Southern Plains Village complexes and show close similarity to Washita River phase assemblages (Brooks and Bell 1989). Projectile points are side notched (Washita and Harrell) and unnotched (Fresno) triangular points. Knives are predominantly the diamond-beveled form. End and side scrapers are present, as are drills, graters, and spokeshaves. The stone used to manufacture these was mostly local flint but Alibates, Edwards, Reed Springs, novaculite, and obsidian do occur (Drass 1998). Ground stone tools include mortars, manos, celts, pipes, and shaft abraders. Bone tools include bison tibia digging stick tips, scapula or horn core hoes, bone awls, rasps, flakers, fish hooks, tubular beads, and deer mandible sickles. Shell was made into scoops and implements or ornamentation such as beads and pendants.

While the artifact assemblage is indicative of hunting and farming economy, the limited extent of investigation of the complex makes the extent of this to be uncertain. Corn has been found at most sites but no evidence of other crops has been found. Bison and deer were the most common animals hunted, with one or the other dominating faunal remains found at sites. Overall little has been firmly established and the need for more work is high to fully understand the cultural group in this region of Texas.

Zimms Complex

The Zimms complex is only defined based on a few sites in Western Oklahoma (Drass et al. 1987). It is a complex that shares many traits with its immediate neighbors of Antelope Creek and Washita River. Flynn (1984, 1986) has proposed from

excavations at the Zimms site that the culture represents either 1) A westward expansion of Washita River people that were influenced by Antelope Creek people 2) an eastward push of Antelope Creek people that started to mix with Washita River people or 3) a local development that incorporated traits from both.

Zimms complex sites are generally found in Roger Mills County in Western Oklahoma. The extent of the range of the Zimms complex appears to be between the Washita and North Canadian River drainages. Settlement size is small and consists of small hamlets or isolated homesteads of one or two houses that are located on high terraces or ridge toes above principal tributary streams. The Zimms complex currently only has a few documented sites. Radiocarbon and archaeomagnetic dates from two sites indicate a temporal range of about 1250 to 1450 A.D. (Brooks et al 1992:72; Flynn 1984:28).

Zimms Complex Sample Sites

Three sites were sampled from sites identified as belonging to the Zimms Complex. The sample from the Zimms Complex represents the smallest sample of the study. Data was gathered from published material.

New Smith Site. This site is designated as 34-RM-400. This site is located on a low terrace, west of the Quartermaster Creek in Roger Mills County in Oklahoma. The site covers an area of 5000 square meters. Excavations were conducted in 1984 by a six man crew comprised of members of the Oklahoma Archaeological Survey staff and volunteers over a period of four days. Two structures, three burials, and ten trash pits

were exposed by this excavation. Summary of these results are reported in Brooks et. al (1992). All three of the burials recovered from this site are used in the study.

Wickham #3 Site. This site is designated as 34-RM-29. This site is located along a 100m by 400m curved band that borders the northern high terrace system of the Washita River Valley. This terrace has been bisected by several drainage structures that cut across the site. Work was conducted as part of a salvage project for the proposed ARKLA gas Pipeline. Summary of this work can be found in Wallis (1984). Materials recovered at the site were evidence of habitation features such as post molds and hearths. Three burials were also recovered and are described in this report. All three burials are used in this study.

Hedding Site. This site is designated as 34-WD-2. This site is located in northwestern Oklahoma in Woodward County. The site lies on a rising ground that overlooks the North and East drainages of Long Creek. This site is also a part of the Oklahoma salvage project the site was discovered and excavated during examination of the area for a proposed highway right of way expansion. Remains found at the site.

Zimms Complex Traits

House structures in the Zimms complex are similar to those found at Antelope Creek sites. They are semi-subterranean with central floor channels and a raised floor platform on the west wall opposite the entrance. The primary difference is the absence of stone in wall construction. Instead the walls used wooden posts plastered with daub.

While architecture is reminiscent of Antelope Creek the artifact assemblage found at Zimms complex sites resemble those found at Washita River phase sites,

especially those in the West. Artifacts of chipped stone include the unnotched and side notched projectile point types as well as some larger dart points. Knives are of the diamond beveled and ovate bifacial type. End and side scrapers are present. Bifacial drills are also reported. The main material used in manufacture is local and Alibates flint but Florence A flint from North Central Oklahoma is also found. Ground stone tools are limited and include manos, grinders, basins, abraders, and celts. Bone tools include bison scapula hoes, bison tibia digging stick tips, and metapodial awls, and antler tine arrow points.

Ceramics are also similar to those found at Washita River phase sites. The dominate type is Quartermaster Plain that is tempered with: shell, limestone, shale, or grit (Moore 1984). Vessel forms have not yet been well defined but are assumed to be similar to other Plains Village groups. The surface of the pottery is generally smooth and lacking decoration. Cord marking is rare but does occur. Some trade ware from the Caddoan area and one sherd from New Mexico have been found at the Zimms and New Smith sites (Brooks et al. 1992; Flynn 1986).

The Zimms complex is not well defined due to the limited number of documented sites. Evidence from the reported sites suggests that the subsistence activities is a standard Plains Village economy but on a much smaller scale (Brooks 1994). Further work will more adequately define the range for this complex. Additionally investigation of site size will be important to see if larger settlements existed or were restricted to homestead sites. If Zimms is only manifested in a low amount of small occupation sites then the complex is likely a derivative of one of the larger groups it neighbors as opposed to being its own cultural development.

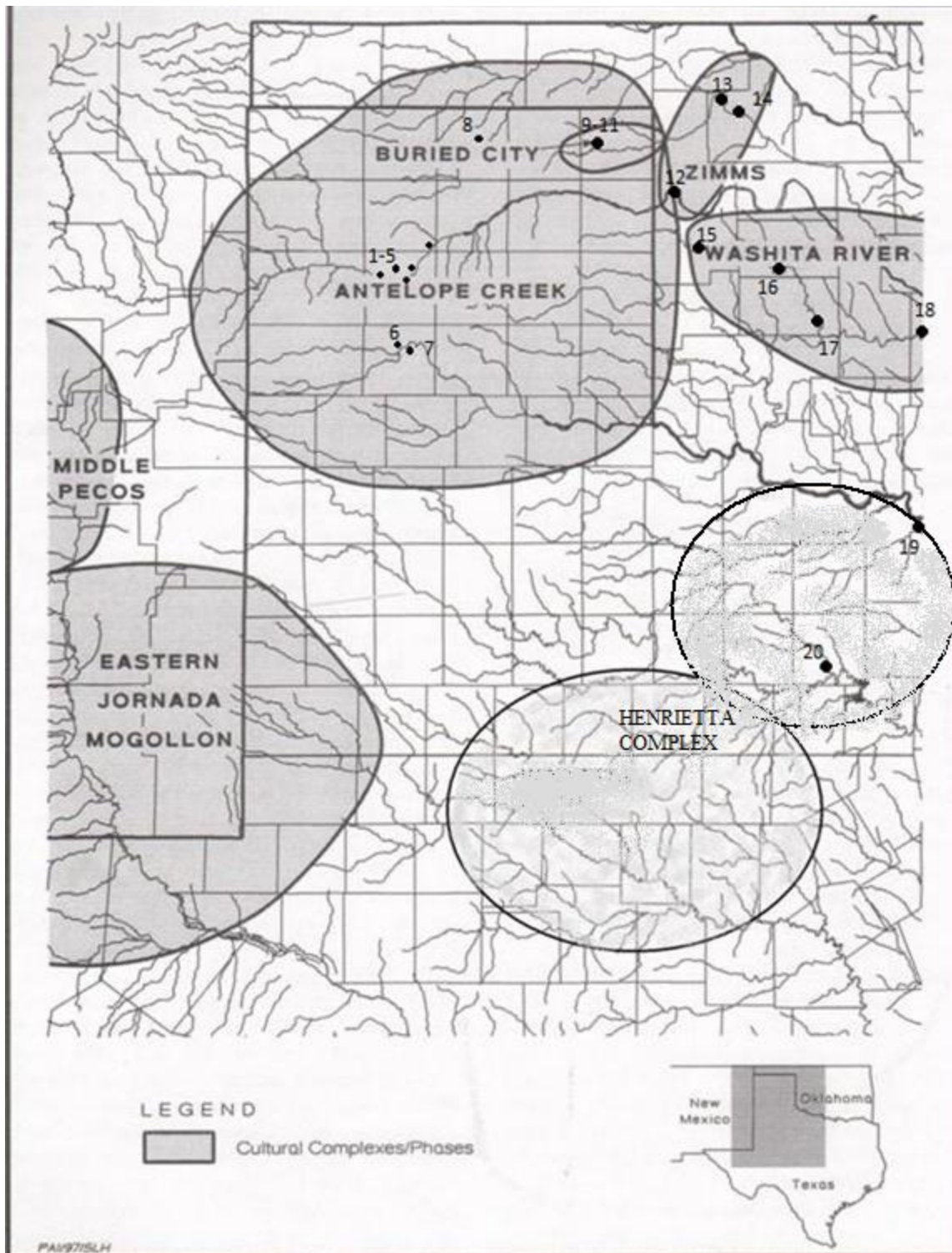


Figure 2. Sites in the sample: 1, Coetas Ruin; 2, Footprint; 3, Alibates 28; 4, Antelope Creek 22/22A; 5, Blue Creek; 6, A180 Burial Cave; 7, A227; 8, Matthews Ranch; 9, Buried City; 10, Courson B; 11, Harold's Pivot Field; 12, New Smith; 13, Hedding; 14, Fred Loomis; 15, Wickham #3; 16, Heerwald; 17, McLemore; 18, Grant; 19, Dillard; 20, Harrell (Modified from Boyd 1997).

Mortuary Theory

Mortuary data can be an invaluable resource in adding to our knowledge of prehistoric populations. For decades archaeologists have recognized this and have often capitalized on recovering burials and extracting the wealth of information they contained. However, emphasis was placed on the description of the burial and associated artifacts. Very little progress was made toward a better understanding and interpretation of the burial itself (Willems 1978). The movement away from description and toward a greater understanding of the mortuary treatment and how it relates to the living population had its roots in the “New Archaeology” movement in the 1960’s.

Lewis Binford was at the forefront of this movement and included in this was a reexamination of the potential of burial data. In his 1971 essay “Mortuary Practices: their Study and Potential” he argued for the existence of cross cultural regularities in the relationship between the organization of the living community and their social complexity and the differentiation that manifests in their mortuary treatment. He proposed that the position of the individual, and the size and composition of the living people that owe him status duties is the primary vehicle for mortuary differentiation (Binford 1972). He also proposed that, in simpler societies, differentiation will mostly be manifested along general categories such as age, sex, and personal achievement whereas complex societies will exhibit differentiation along more abstract characteristics that are independent of age, sex, and subgroup affiliation (1972:230). However, his study only drew upon ethnographic data and failed to consider the archaeological remains themselves and how mortuary differentiation is manifested (O’Shea, 1984).

Saxe (1970) and Brown (1971) were also a part of this new perspective as they were pioneers in developing the dimensional approach of mortuary analysis. This approach attempts to identify each category of differentiation that is observed in the archaeological manifestation of mortuary ritual. These dimensions are then related back to categories of social differentiation in a living population (O'Shea and Zvelebil 1984). O'Shea refined this work and attempted to create "a fundamental structure that integrates these potential theories into a coherent system for the archaeological study of funerary remains" (O'Shea, 1984:22). This was seen in his 1984 study of three plains societies. In this study he demonstrated, through the study of ethnohistorical data and archaeological data, that regularity exists in the relationships that link aspects of a living population and its mortuary treatment of the dead. Among the central relationships are:

- 1) Mortuary differentiation is patterned, and its elements are integrated with other aspects of the sociocultural system.
- 2) The mortuary differentiation accorded an individual, although not necessarily isomorphic, is consistent with his social position in the living society.
- 3) The complexity of the system of mortuary differentiation will increase with the complexity of the society at large (O'Shea, 1984:21).

These previous studies have demonstrated the value that mortuary studies can provide in examining social systems of prehistoric societies. Not only do they often provide a wealth of information in the form of grave offerings, but they also provide insight into the way of life of the living population that they represent. No ethnohistorical documentation is available for this temporal period in the Southern Plains. Examining the mortuary treatment, combined with other archaeological data, can add some insight into the sociopolitical organization of these plains people and their interaction with other

peoples in the absence of ethnographic information. To date, research involving mortuary data has been limited for the late prehistoric Southern Plains.

Previous Mortuary Work on the Southern Plains

Previous work on mortuary practices is primarily limited to description. Burials are often described accompanying site reports but little discussion of the data they provide has been forthcoming. This can be attributed to the small amount of burials that have been recovered in the Southern Plains. A lot of data has also been lost to construction or vandals who have destroyed a multitude of burials for the grave goods they contain. Consequently the Southern Plains has a much smaller number of burials recovered than adjacent regions where more comprehensive mortuary analyses have been employed.

Cyrus Ray was one of the earliest to describe and discuss mortuary treatment on the Southern Plains. His work between 1931 and 1939 in the Abilene region off of the Brazos River in Texas revealed many burials. He documented variation in burial location noting hilltop and river margin locations for burials. He also looked at individual grave construction. The most common was the below ground stone slab cists. These stone cists can be smaller for one grave or larger to be what Ray referred to as “stone cist mounds” containing multiple interments. Within these stone cists he identified three primary forms of burial treatment: primary flexed, primary or secondary cremation, and bundle burial (Ray 1931, 1933, 1937, 1939). These burials contained individuals representing both sexes and all ages and included a variety of grave goods.

Jack Hughes in his thesis work on the Harrell site of the Henrietta complex described the burials for 32 individuals recovered at the site. He discussed the patterning of burials and variation in body positions and orientation of the graves (1946). Lopez (1970) used cluster analysis in his analysis of a Washita River phase cemetery at the McLemore site to try to discover associations between selected burial attributes and specific age and sex groups. On the whole the results of his analysis detected considerable homogeneity that reflected an egalitarian society but some distinctions were detected that hinted of an ascribed or ranked social system. Non-locally manufactured items were also found to be more associated with women and children (1970). Lopez also examined seasonal mortality. He found that burial orientation followed an east-west axis that he interpreted as following the rising or setting of the sun (1970). He detected seasonal deaths by looking at grouping of burials that were aligned with the solstices and equinoxes. He concludes, "from this data it has been possible to hypothetically infer a year-round occupation of the site and the approximate time of burial can be established within a 50 day range" (Lopez 1970:138).

Christopher Lintz in his comprehensive examination of the Antelope Creek phase (1986) also included a brief discussion of burial practices using data that comprised 47 burials that represented 65 individuals from nine sites. This is the most comprehensive analysis of multiple sites to date. Lintz found that grave goods were relatively rare and were mostly utilitarian in nature. Trade goods were mostly associated with women and children. He interpreted this as being reflective of a society with a matricentered rule of descent. He also looked at the Footprint site (Green 1967) and its very different pattern of disposal. Instead of single primary interments three ossuary pits were dug in room 1

that contained between 32 and 36 individuals with evidence of fire as well as a separate skull pile (Patterson 1974; Moore-Jansen et al. 2011). Interpretation of this site is difficult due to the possibility of the skull pile representing non Antelope Creek people as well as several key field observations being missed during excavation (Lintz 1986:168).

The New Smith site of the Zimms complex also was studied (Brooks et al. 1992). This site represents a mortuary site in which 3 burials were found. The method of disposal is of a type that has not been observed at other Plains Village sites. These burials were found in structures that are thought to be Arbors with adjacent, refuse filled pits surrounding them. These pits are thought to represent the byproducts of a mortuary ceremony.

Lastly, in 1997 Summers in her masters thesis contributed to our knowledge of mortuary treatment of people from the Texas Panhandle. Data was collected from published sources as well as from a comprehensive review of the files at the Panhandle-Plains Historical Museum. This data, covering several time periods and cultures, was then presented and the data summarized. Included in her study was data from the Antelope Creek phase and the Buried City complex.

All of these studies have examined mortuary behavior on a small scale. Only Lopez (1970) and Lintz (1986) have attempted to infer social implications of the mortuary data. The present study looks to achieve this on a greater scale by looking at five of the plains village cultural manifestations to not only examine mortuary behavior within each group, but to try to ascertain what the data might reveal about their relationships with surrounding people.

CHAPTER THREE

MATERIALS AND METHODS

Methods of Data Collection and Reporting

Data was collected from a wide range of sources (Table 1). First the literature was thoroughly reviewed for syntheses that contained collections of sites with human skeletal samples (Owsley et al. 1989) or burial data collections (Summers 1997). Also included in the review were published site reports from sites representing the five southern plains cultures for instances of burials as well as supplementary osteological reports on the remains. Several unpublished Masters theses were also a source of information (DE Patterson 1974; DK Patterson 1975).

Files from the Archaeology Laboratory at the Panhandle Plains Historical Museum (PPHM) were also utilized in this project for burials located in Texas. Included in these files were individual burial files, field notes of Panhandle Plains Historical Museum archeologists Jack Hughes and Billy Harrison (Hughes 1955, 1957, 1962), unpublished literature, osteological reports by Douglas Owsley (Owsley n.d.), and the Native American Graves Protection and Repatriation inventory documents (Taylor 1995). The data gathered at the Panhandle Plains Historical Museum were the result of both excavations by professional archeologists and from contributions from private donors.

In addition, unpublished literature from the files of David T. Hughes of Wichita State University was assessed. These include Osteological analyses by Peer H. Moore-Jansen of Wichita State University (1991) and Diane Dembiecki (1987) of burials.

Table 1: Sources of Data.

Antelope Creek		Washita River		Buried City		Henrietta		Zimms	
Site	Sourced Authors	Site	Sourced Authors	Site	Sourced Authors	Site	Sourced Authors	Site	Sourced Authors
Blue Creek	Couzzourt and Couzzourt 1996 Taylor 1996	McLemore	Pillaert 1963; Brues 1962	Harold's Pivot	Moore-Jansen 1991	Dillard	Martin 1994; Albrect 1994	New Smith	Brooks et al. 1991
Alibates 28	Baker and Baker 1939, 1941; Taylor 1996	Grant	Sharrock 1961	Buried City	Moore-Jansen 1991	Harrell	J Hughes 1942	Hedding	Shaeffer 1965
Antelope Creek 22	Baker and Baker 1939, 1941; Taylor 1996	Heerwald	Shaeffer 1965; Brues 1965	A180	J Hughes 1955; Taylor 1996			Wickham #3	Wallis 1984
Antelope Creek 22A	Baker and Baker 1939, 1941; Taylor 1996			A546	J Hughes 1962				
Fred Looms Site	Kay County 1963; Brues 1963			A227	J Hughes 1957				
Coetas Ruin	Studer 1934			Courson B	Hughes and Hughes-Jones 1987; Dembieki 1987				
Footprint	Green 1967; Moore-Jansen 2011								

recovered from sites in the Texas panhandle in the course of excavations by David T. Hughes (Hughes and Hughes-Jones 1987).

All materials were reviewed for the presence of ample documentation of burial data. Each site that contained burials were reviewed for burial data that include: age, sex, presence and documentation of grave goods, condition of the skeleton, burial position and deposition of the body, orientation of the grave, skull direction, direction the skull was facing, mortuary facility, and evidence of disturbance. All data collected is from the source that is cited for that site (Table 1). Sites that did not have ample documentation or only vague or brief comments on burial data were excluded from this study. Burials with uncertain or no cultural affiliation were also excluded.

Classes of Data

Each class of data was collected from previously published or unpublished material (Table 1). All the observations for each class of data was made by the cited author(s) for that site. The present study is a collection and aggregation of these data and the data were placed in categories created by the author.

Age

Individuals were assigned an age category that is based on the assessed skeletal age at death of the individual from the source documentation. This determination was made by the archaeologist in the field or by subsequent examination by a biological anthropologist. On occasions that the field archaeologist's determination was contradicted by later examination by the biological anthropologist the age was assigned to the determination of the later. This age data was then collected and were

placed into categories divided into: Infant (birth to 2 years), child (3-12), adolescent (13-19), unknown juvenile, young adult (20-34), middle age adult (35-49), older adult (50+), unknown adult, and indeterminate. All age designations were made by the cited source. The author grouped the individuals into the age categories above.

Sex

Individuals were placed into sex categories based on skeletal indicators of sex as determined by the field archaeologist or if available by laboratory analysis of a biological anthropologist. The sex categories that will be used are male, female, and indeterminate. All sub adults will be classed as indeterminate due to the difficulty in assessing sex in sub adults.

Grave Goods

Burials will be examined for the inclusion of utilitarian objects and those of ornamentation. Utilitarian objects are those of local manufacture that are used in everyday activities. Ornamentation objects are those that are specially made and can represent status symbols. Ornamentation objects can be manufactured locally or be acquired in trade.

Burial Position

The burial position is the position that the body was placed in when interred in the grave. The three primary categories flexed, extended, and unknown. Burials will be labeled as flexed when they have been described in reports as flexed, semi-flexed, tightly flexed, fetal, or description of significant flexing of the lower limbs. Burials will be designated as extended if described as extended, lower limbs straight, or limbs close to

Burial Deposition

Burial deposition refers to how the body was deposited in the grave. The observations of the archaeologists were recorded as being either: right side, left side, back, stomach, or not applicable if the body was disarticulated or otherwise scattered. Burials where no data is available will be designated as unknown.

Orientation

This category represents the direction the body was recorded to have laid. The orientation of the body will be designated using the cardinal directions such as North to South, East to West, and derivatives of these using combinations of directions. The direction the skull was pointing and facing will also be designated. These will be North, South, East, West, up, or down.

Mortuary Facility

This section has three subdivisions. Each subdivision's data were collected from field notes or published site reports. The first is the location of the grave. Location of the grave were described as being in a cemetery, in a structure, or isolated. The second will be the number of individuals in the grave and will be described as single or multiple. The third will be the variety of facility. Single internments will be designated to graves that were simple pits with no added stone. Graves that included use of stone in the grave fill will be marked as Simple Stone. Those graves that had more extensive use of larger stone slabs in construction of the grave (I.E. multiple large slabs over graves or stone cairn) are labeled as Complex Stone. Individuals found on the surface of a site are labeled as Surface Burial.

Methods of Analysis

Once the data was collected and tabulated the burials were grouped by culture. Each category of data will be summarized as summary statistics of occurrence for each culture. These frequencies of occurrence of these categories for each culture will then be compared.

Grave goods will be emphasized in this study. Grave goods were analyzed for their presence or absence. When known, the type of artifact was noted. The types of artifacts that were present will also be noted. The categories of these types are divided into locally produced items and items that were produced non-locally or made from non-local raw materials, these items were likely acquired in trade. Occurrences will then be analyzed across age and sex classes. The results of this analysis for each culture will then be compared to each other.

Finally, The mortuary deposition observed at the footprint site will be examined in light of mortuary behavior observed at other Antelope Creek phase sites.

CHAPTER 4

MORTUARY DATA

Guide for Aggregate Tables

Each cultural manifestation will have a mortuary aggregate data. Each aggregate table presents all the burials for that cultural group. The column headings include: Site, Burial #, # of Individuals, Sex, Age Class, Grave Goods, Deposition, Position, Facility, Location, Skull Facing, and Orientation. Any field that is left blank is because is data not available for that category.

Site

The first column indicates the site that the remains were reported to have been recovered from. It does not indicate the current state of the remains or their current location.

Burial

This field designated the number that was given to the burial. This number is the same as the number used to designate the burial in the published literature or used in field notes and records. If there was a contradiction between the final published report and those assigned in the field the number will correspond to the one found in the final report.

of Individuals

The column labeled as # of Individuals designates how many individuals were recovered from that grave. In the case of a grave having multiple individuals the category will list the amount of individuals then all subsequent individuals listed from the

same grave will have a blank field. The burial number will be designated for the first individual and subsequent individuals will be designated by the burial number and letters such as 1, 1A, 1B *etcetera*.

Sex

The sex category of the tables has four possible designations: male (M), probable male (PM), female (F), probable female (PF). Juvenile individuals are not assigned a sex.

Age

The age category has seven possible designations. These categories are: Infant, Child, Adolescent, young adult, middle age adult, older adult. Those individuals where only general age is known will be labeled as juvenile for subadults and unknown adult for adult.

Grave Goods

The grave goods category of this table has designations of either yes or no for the presence of grave goods associated with the grave. Separate tables will list the grave goods associated with specific graves and if the items associated with the grave are of local or non-local origin.

Deposition

Depositional information refers to whether the body was found on its right side, left side, back, or stomach. It will be labeled as other if none of these categories apply.

Position

The position column designated the way the body was positioned within the grave. The three categories are flexed, extended, or other.

Facility

Data on the nature of the mortuary facility the body was placed in is presented in this column. Simple internments (SI), is for graves found in a simple pit without any added materials to cover the burial. Simple stone (SS) designates burials where stones were added to the fill or a few larger slabs were placed over the body. Complex stone (CS) is for burials that had an extensive use of stone in construction of the grave and was the primary method of covering the body such as in the case of stone cairns.

Location

The location column presents where the grave was found. The grave will have the designation of "Cemetery" if the grave was found in a separate area that was used for burying the dead. A burial found inside a structure are designated with "Structure". Burials found in middens or isolated burial cysts away from other burials are labeled as "Isolated".

Skull Facing

This category designates the direction the skull was facing at time of discovery. The possible designations in this category are one of the cardinal directions or combinations of those directions. "Up" and "Down" are also used.

Orientation

The Orientation category refers to the direction the body was laid and is designated by giving the cardinal directions of the body. The first direction refers to the point where the skull rested.

Distribution of Grave Goods table

This table will list each burial that was found to have grave goods associated with the body. Each burial will have site, burial number, age, and sex data. Additionally the entirety of the artifact assemblage for the burial will be listed. Finally, the table will designate whether the objects were objects likely manufactured locally or those manufactured non-locally or made from non-local resources. This category will have one of three designations: local, non-local, or both.

Antelope Creek Phase

There are 52 burials containing 72 individuals from sites affiliated with the Antelope Creek phase.

Age

Of the 72 individuals represented in the Antelope Creek burials, 71 (99%) had at least some age related data collected (Table 2). 30 (42%) of the 71 individuals were sub adults and 41 (58%) were adults. In the sub adult category 12 (17%) were infants, 16 (23%) were children, and two (3%) were adolescents. The adult category is represented by two (3%) were young adults, nine (13%) middle age adults, 12 (17%) older adults, and 18 (25%) unknown adults who could not be aged specifically into any of the adult age categories.

Sex

Data on sex was only available in 26 (36%) of the 72 individuals (Table 2). Of these 26 individuals 17 (65%) were classified as male, two (8%) as being probable male and seven (27%) as female.

Table 2: Antelope Creek Demographics.

Age	Adult Age Distribution				Total	Juvenile Age Distribution	
	Male	Female	PMale	Unknown		Age	Total
Young Adult	0	2	0	0	2	Infant	12
Middle Age Adult	7	2	0	0	9	Child	16
Older Adult	8	3	0	1	12	Adolescent	2
Unknown Adult	2	0	2	14	18		
Unknown	0	0	0	1	1		
Total	17	7	2	16	42	Total	30

Facility

Data on the facility the individual was buried in was available for 69 (96%) of the 72 individuals in the sample (Table 3). Of these 69, 13 (19%) were buried in simple internments, 27 (39%) were buried in graves using some stone in burial construction, and 29 (42%) were in graves that involved the complex use of stone in construction of the mortuary facility.

Deposition

54 (75%) individuals had information concerning the deposition of the body in the grave (Table 3). Of these 54 individuals 16 (30%) were deposited on their right side, 13 (24%) were laid on their left side, 15 (28%) were placed on their back, 6 (11%) were on their stomach, and two (4%) were found in other positions.

Position

Information regarding the position of the body in the grave was available for 50 (69%) of individuals (Table 3). Of these 44 (88%) were buried in a flexed position, four (8%) were buried in an extended position, and two (4%) were buried in other positions.

Table 3: Antelope Creek Mortuary Data

Site	Burial #	# of Individuals	Sex	Age Class	Grave Goods	Deposition	Position	Facility	Location	Skull Facing	Orientation
Blue Creek ¹	1	1	NO	Infant	Yes	Left Side	Flexed	CS	Cemetery	E	NW to SW
Blue Creek ¹	2	1	NO	Infant	No	Right Side	Flexed	CS	Cemetery		
Blue Creek ¹	3	1	NO	Child	Yes	Left Side	Flexed	CS	Cemetery	S	E to W
Blue Creek ¹	4	1	NO	Adolescent	Yes	Left Side	Flexed	CS	Cemetery	NE	NW to SW
Blue Creek ¹	5	1	F	Young Adult	No			CS	Isolated		
Blue Creek ¹	6	1	M	Middle Age Adult	Yes			CS			
Alibates 28 ^{2,3}	1	1	NO	Child	No	Back	Flexed	SS	Structure	W	N to S
Alibates 28 ^{2,3}	2	1	F	Young Adult	No	Right Side	Flexed	SS	Structure	W	N to S
Alibates 28 ^{2,3}	3	1	F	Older Adult	No	Stomach	Flexed	SS	Structure	D	E to W
Alibates 28 ^{2,3}	4	1	NO	Infant	No			SI	Structure		
Alibates 28 ^{2,3}	5	1	NO	Child	No	Back	Flexed	SI	Structure	W	N to S
Alibates 28 ^{2,3}	6	1	NO	Infant	Yes	Back	Flexed	SI	Structure	E	N to S
Alibates 28 ^{2,3}	7	1	NO	Child	No	Right Side	Flexed	CS	Structure	N	E to W
Alibates 28 ^{2,3}	8	1	NO	Child	Yes	Back	Flexed	CS	Structure	U	E to W
Alibates 28 ^{2,3}	9	1	M	Older Adult	No	Right Side	Flexed	CS	Structure	W	N to S
Alibates 28 ^{2,3}	10	1	F	Middle Age Adult	No	Right Side	Flexed	CS	Structure		
Alibates 28 ^{2,3}	11	1	M	Older Adult	No	Right Side	Flexed	SS	Isolated	NE	NE to SE
Alibates 28 ^{2,3}	12	1	M	Older Adult	No	Right Side	Flexed	CS	Structure	E	SW to NW
Alibates 28 ^{2,3}	13	1	NO	Child	No	Stomach	Flexed	CS	Structure	D	E to W
Alibates 28 ^{2,3}	14	1	F	Older Adult	No	Back	Flexed	CS	Isolated	NE	SW to NW
Antelope Creek 22 ^{2,3}	1	1	M	Older Adult	No	Left Side	Flexed	CS	Structure	SW	SE to NW
Antelope Creek 22 ^{2,3}	2	1	NO	Infant	No			CS	Structure		E to W
Antelope Creek 22 ^{2,3}	3	3	M	Middle Age Adult	Yes	Stomach	Flexed	CS	Structure	E	N to S
Antelope Creek 22 ^{2,3}	3B		F	Older Adult	No			CS	Structure		
Antelope Creek 22 ^{2,3}	3C		M	Older Adult	No			CS	Structure		
Antelope Creek 22 ^{2,3}	4	1	NO	Child	No	Back	Flexed	CS	Structure	E	N to S
Antelope Creek 22 ^{2,3}	5	1	M	Older Adult	No	Right Side	Flexed	CS	Structure	U	E to W

Table 3 Continued

Site	Burial #	# of Individuals	Sex	Age Class	Grave Goods	Deposition	Position	Facility	Location	Skull Facing	Orientation
Antelope Creek 22 ^{2,3}	6	1	M	Middle Age Adult	No	Left Side	Flexed	CS	Structure	E	N to S
Antelope Creek 22 ^{2,3}	7	1	NO	Child	No	Back	Flexed	CS	Structure	E	N to S
Antelope Creek 22A ^{2,3}	1	1	U	Older Adult	No	Left Side	Flexed	SI	Structure		N to S
Antelope Creek 22A ^{2,3}	2	1	NO	Infant	Yes	Right Side	Flexed	SI	Structure		E to W
Antelope Creek 22A ^{2,3}	3	1	F	Middle Age Adult	Yes	Back	Flexed	SI	Structure		W to E
Antelope Creek 22A ^{2,3}	4	1	M	Middle Age Adult	No	Right Side	Flexed	SI	Structure		N to S
Antelope Creek 22A ^{2,3}	5	1	NO	Child	Yes	Left Side	Flexed	SI	Structure		N to S
Antelope Creek 22A ^{2,3}	6	1	M	Older Adult	No	Left Side	Flexed	CS	Structure		N to S
Antelope Creek 22A ^{2,3}	7	1	NO	Infant	No		Flexed	SI	Structure		NW to SE
Antelope Creek 22A ^{2,3}	8	1	M	Older Adult	No	Back	Flexed	CS	Structure		E to W
Antelope Creek 22A ^{2,3}	9	1	M	Middle Age Adult	Yes	Right Side	Flexed	CS	Structure		S to N
Antelope Creek 22A ^{2,3}	10	1	NO	Infant	Yes	Back	Extended	SI	Structure		W to E
Fred Looms Site ^{4,5}	1	1	M	Middle Age Adult	Yes	Left Side	Flexed	CS	Cemetery		SE to NW
Fred Looms Site ^{4,5}	2	1	M	Unknown Adult	No	Stomach	Flexed	CS	Cemetery		
Fred Looms Site ^{4,5}	3	1	U		No			SI	Cemetery		
Fred Looms Site ^{4,5}	4	1	PM	Unknown Adult	Yes	Stomach	Extended	SI	Cemetery		N to S
Fred Looms Site ^{4,5}	5	1	M	Unknown Adult	Yes	Left Side	Flexed	SI	Cemetery		SE to NW
Fred Looms Site ^{4,5}	6	1	U	Unknown Adult	Yes	Left Side	Flexed	SS	Cemetery		S to N
Fred Looms Site ^{4,5}	7	1	U	Unknown Adult	No	Back	Flexed		Cemetery		E to W
Fred Looms Site ^{4,5}	8	1	M	Middle Age Adult	Yes	Right Side	Flexed	SS	Cemetery		W to E
Fred Looms Site ^{4,5}	9	1	PM	Unknown Adult	No	Other	Other		Cemetery		S to N
Fred Looms Site ^{4,5}	10	1	U	Unknown Adult	No				Cemetery		SE to NW
Coetas Ruin ⁶	1	1	NO	Child	Yes			CS	Isolated		E to W
Coetas Ruin ⁶	2	1	NO	Child	No			CS	Isolated		E to W

Table 3 Continued

Site	Burial #	# of Individuals	Sex	Age Class	Grave Goods	Deposition	Position	Facility	Location	Skull Facing	Orientation
FootPrint ^{7,8}	Burial Pit A1	7	NO	Infant		Back		SS	Structure		
FootPrint ^{7,8}	Burial Pit A2		NO	Infant		Unknown		SS	Structure		
FootPrint ^{7,8}	Burial Pit A3		NO	Child		Right Side	Flexed	SS	Structure		
FootPrint ^{7,8}	Burial Pit A4		U	Unknown Adult	Yes	Right Side	Flexed	SS	Structure		
FootPrint ^{7,8}	Burial Pit A5		U	Unknown Adult		Right Side	Flexed	SS	Structure		
FootPrint ^{7,8}	Burial Pit A6		U	Unknown Adult		Left Side		SS	Structure		
FootPrint ^{7,8}	Burial Pit A7		U	Unknown Adult				SS	Structure		
FootPrint ^{7,8}	Burial Pit B1	7	NO	Infant				SS	Structure		
FootPrint ^{7,8}	Burial Pit B2		NO	Child				SS	Structure		
FootPrint ^{7,8}	Burial Pit B3		NO	Child				SS	Structure		
FootPrint ^{7,8}	Burial Pit B4		U	Unknown Adult	Yes	Back		SS	Structure		
FootPrint ^{7,8}	Burial Pit B5		U	Unknown Adult		Left Side	Flexed	SS	Structure		
FootPrint ^{7,8}	Burial Pit B6		U	Unknown Adult				SS	Structure		
FootPrint ^{7,8}	Burial Pit B7		U	Unknown Adult				SS	Structure		
FootPrint ^{7,8}	Burial Pit C1	7	NO	Infant				SS	Structure		
FootPrint ^{7,8}	Burial Pit C2		NO	Child		Stomach	Extended	SS	Structure		
FootPrint ^{7,8}	Burial Pit C3		NO	Child		Back	Flexed	SS	Structure		
FootPrint ^{7,8}	Burial Pit C4		NO	Adolescent	Yes	Back	Extended	SS	Structure		
FootPrint ^{7,8}	Burial Pit C5		U	Unknown Adult		Right Side	Flexed	SS	Structure		
FootPrint ^{7,8}	Burial Pit C6		U	Unknown Adult		Other	Other	SS	Structure		
FootPrint ^{7,8}	Burial Pit C7		U	Unknown Adult		Back		SS	Structure		
FootPrint ^{7,8}	Skull Pile	10	U		No	Other	Other	SI	Structure		
FootPrint ^{7,8}	Surface	Unknown	U		Yes	Other	Other	SB	Structure		

Data from: 1. Couzzourt and Couzzourt 1996; 2. Baker and Baker 1941; 3. Taylor 1996; 4. Kay County 1963; 5. Brues 1963; 6. Studer 1934; 7. Green 1967; 8. Moore-Jansen 2011.

Location

The location of where the individuals were buried was recorded for 71 (99%) individuals in the sample (Table 3). Of these, 14 (20%) were buried in a cemetery area. 52 (73%) were found buried inside of structures. Five (7%) of the individuals were found isolated in middens or isolated away from other burials.

Orientation

Data concerning the orientation of the individual within the grave was available for 42 (58%) of antelope creek burials (Table 3) . A north to south orientation was the most prevalent with 14 (33%) of the burials being buried as such. An east to west orientation had 12 (29%) burials. Three individuals were buried west to east (7%), three individuals south to north (7%), two northwest to southwest (5%), one northwest to southeast (2%), one northeast to southeast (2%), two southwest to northwest (5%), four southeast to northwest (10%).

Skull Facing

Data on the direction the skull was facing was available for 21 (29%) of the individuals (Table 3). In seven of these the skull was facing east (33%). Four of the individuals had the skull facing west (19%). Three (14%) were facing northeast, while two (10%) individuals' skulls were facing up and two (10%) down. 1(5%) individual each was found to be facing north, south, and southwest.

Grave Goods

Burials with associated grave goods were uncommon in the sample. Artifacts interred with individuals were both locally manufactured items as well as those acquired from trade. Common items interred with the dead that are locally produced are: cord

marked pottery, projectile points, bison tibia hoes, lithic flakes, shell, awls, various kinds of flint knives, antler tools, and side scrapers. Items of non-local manufacture include: olivella shell beads, conch shell gorgets and pendants, turquoise pendants and beads, disc shell beads, and rounded and polished pieces of coal (Lintz 1986:171, 173).

Data on the inclusion of grave goods that could be directly associated with an individual was recorded for 18 (25%) individuals (Table 4). A further 21 (29%) individuals from the Footprint site had grave goods found inside the three burial pits, but documentation could not associate them specifically with any of the individuals. Of the 18 individuals where association of grave goods could be deduced, four of them were infants (22%), 5 of them children (28%), six were middle age adults (33%), and three were unknown adults (17%). eight of the 18 burials (44%) only had locally manufactured goods interred with them as well as eight (44%) only having non locally made goods interred. Two of the burials had both local and non-local goods (11%) (Table 5). The Footprint site burial pits also had both non local and locally made artifacts found interred with the individuals. These three burial pits contained individuals that represent all age and sex classes (Green 1967; Patterson 1975; Moore-Jansen 2011).

Table 4: Antelope Creek Distribution of Grave Goods.

Sex	Age	Present	Not Present	Total
	Infant	4	4	8
	Child	4	7	11
	Adolescent	1	0	1
Males	Young Adult	0	0	0
	Middle Age			
	Adult	5	2	7
	Older Adult	0	12	12
	Unknown Adult	1	1	2
Females	Young Adult	0	2	2
	Middle Age			
	Adult	1	1	2
	Older Adult	0	3	3
	Unknown Adult	0	0	0
PMales	Unknown Adult	1	1	2
Unknown	Unknown Adult	1	0	1

Table 5: Antelope Creek Grave Goods.

Site	Burial Number	Age Class	Sex	Grave Goods	Grave Good Type
Blue Creek ¹	41-MO-184-TAS-1	Infant		64 pottery sherds in Stone Cairn, 50 associated with the burial	Local
	41-MO-184-TAS-3	Child		2 Washita points made of Alibates flint	Local
	41-MO-184-TAS-4	Child		Bison Tibia hoe, 4 Alibates flint points, 34 pieces of lithic debitage, 2 quartzite pebbles, 189 pottery sherds, 2 turtle shell pieces, 4 mussel shell pieces, piece of petrified wood	Both
	41-MO-184-A678-6-1	Middle Age Adult	M	2 flint flakes, 3 pebbles, deer antler, 3 cord-marked sherds	Local
Alibates 28 ²	6	Infant		Bone awl	Local
	8	Child		10 Olivella Shell Beads	Non Local
Antelope Creek 22 ²	3	Middle Age Adult	M	1 laurel-leaf shaped flint knife, 1 4 edged flint knife	Local
Antelope Creek 22A ²	2	Infant		Flint side scraper	Local
	3	Middle Age Adult	F	1 Elbow Pipe, 4 Polished Coal pieces, 4 deer antler tools	Local
	5	Child		1 large conch shell, 2 strands of 940 shell disc beads, 3 turquoise pendant, 4 olivella shell beads, and 1 scraper	Both
	9	Middle Age Adult	M	1 piece of colored shell	Non Local

Table 5 Continued.

Site	Burial Number	Age Class	Sex	Grave Goods	Grave Good Type
Antelope Creek 22A ²	10	Infant		116 shell disk beads, 13 olivella shell beads, 1 turquoise bead, 1 small conch shell	Non Local
Fred Loomis Site ³	1	Middle Age Adult	M	3 Olivella shell beads	Non Local
	4	Adult	PM	1 Olivella shell bead	Non Local
	5	Adult	M	6 Olivella shell beads	Non Local
	6	Adult	U	1 triangular point, bison digging stick tip	Local
	8	Middle Age Adult	M	1 Turquoise pendant, 1 microcline pendant	Non Local
Coestas Ruin ⁴	1	Child		56 Olivella shell beads, 1 mussel shell pendant	Non Local
Footprint ⁵	Burial Pit A	Mixed	Mixed	2 Flint knives, 2 shell pendants, several shell beads, 1 Stone pipe.	Both
	Burial Pit B	Mixed	Mixed	3 Projectile Points, 2 conch shell gorgets, shell beads, cordmarked pot, charred basketry	Both
	Burial Pit C	Mixed	Mixed	3 Flint knives, 3 arrow points, 7 awl fragments, 1 olivella bead, 2 pendants	Both

Data from: 1. Couzzourt and Couzzourt 1996; 2. Baker and Baker 1941; 3. Kay County 1963; 4. Studer 1934; 5. Green 1967

Washita River Phase

The Washita river phase sample consists of 57 burials representing 62 individuals.

Age

Of the 62 individuals represented in the antelope creek burials, all had at least some age related data collected (Table 6). 39 (63%) of the 62 individuals were sub adults and 23 (37%) were adults. In the sub adult category 31 (50%) were infants, seven (12%) were children, and 1(2%) were adolescents. The adult category is represented by 11 (18%) were young adults, 11 (18%) middle age adults, 0 older adults, and one (2%) unknown adults who could not be aged specifically into any of the adult age categories.

Sex

Data on sex was only available in 23 (37%) of the 62 individuals (Table 6). Of these 23 individuals 10 (43%) were classified as male and 13 (57%) as female.

Table 6: Washita River Demographics.

Age	Adult Age Distribution			Total	Juvenile Age Distribution	
	Male	Female	Unknown		Age	Total
Young Adult	4	7	0	11	Infant	31
Middle Age Adult	5	6	0	11	Child	7
Older Adult	0	0	0	0	Adolescent	1
Unknown Adult	1	0	0	1		
Unknown	0	0	0	0		
Total	10	13	0	23	Total	39

Facility

Data on the nature of the mortuary facility was available for all of the burials from the Washita river phase (Table 7). All 62 graves were characterized by simple internments with no use of stone in the construction of the grave.

Deposition

Data on the deposition of the body within the grave was available for 48 (77%) of the Washita river sample (Table 7). Of these, six were deposited on their right side (13%), 12 on their left side (35%), 21 on their back (44%), and four on their stomach (8%).

Position

Information regarding the position of the body in the grave was available for 47 (76%) of individuals (Table 7). Of these 40 (85%) were in a flexed position and seven (15%) were in an extended position.

Location

Locational data of the graves were available for all 57 graves (Table 7). 56 (98%) were buried in cemetery areas and one grave (2%) consisting of three individuals was found isolated.

Orientation

Data on the orientation of graves was available for 53 of the 62 individuals (85%) (Table 7). 42 of these (79%) were oriented east to west. Other individuals were oriented: west to east one (2%), two south to north (3%), two north to south (3%), one northeast to southeast (2%), one northeast to southeast (2%), and five southeast to northwest (9%).

Table 7: Washita River Phase Mortuary Data.

Site	Burial #	# of Individuals	Sex	Age Class	Grave Goods	Deposition	Position	Facility	Location	Skull Facing	Orientation
McLemore ^{1,2}	1	1	NO	Infant	No	Right Side	Flexed	SI	Cemetery		SE to NW
McLemore ^{1,2}	2	1	F	Middle Age Adult	Yes	Right Side	Flexed	SI	Cemetery		SE to NW
McLemore ^{1,2}	3	1	NO	Infant	No	Right Side	Flexed	SI	Cemetery	U	E to W
McLemore ^{1,2}	4	1	F	Middle Age Adult	No	Back	Flexed	SI	Cemetery	U	E to W
McLemore ^{1,2}	5	1	NO	Infant	No	Back	Flexed	SI	Cemetery	D	E to W
McLemore ^{1,2}	6	1	NO	Infant	Yes	Left Side	Flexed	SI	Cemetery	S	E to W
McLemore ^{1,2}	7A	2	F	Young Adult	No	Back	Flexed	SI	Cemetery	U	E to W
McLemore ^{1,2}	7B		NO	Infant	Yes			SI	Cemetery		
McLemore ^{1,2}	8	1	NO	Infant	Yes	Back	Flexed	SI	Cemetery	U	E to W
McLemore ^{1,2}	9A	2	F	Adolescent	Yes	Left Side	Flexed	SI	Cemetery		E to W
McLemore ^{1,2}	9B		NO	Child	Yes			SI	Cemetery		
McLemore ^{1,2}	10	1	M	Young Adult	Yes	Left Side	Flexed	SI	Cemetery	S	E to W
McLemore ^{1,2}	11	1	NO	Infant	Yes	Back	Flexed	SI	Cemetery	S	NE to SW
McLemore ^{1,2}	12	1	NO	Infant	No	Left Side	Flexed	SI	Cemetery		SE to NW
McLemore ^{1,2}	13	1	M	Young Adult	No	Stomach	Extended	SI	Cemetery	S	E to W
McLemore ^{1,2}	14	1	M	Middle Age Adult	Yes	Back	Flexed	SI	Cemetery	U	E to W
McLemore ^{1,2}	15	1	F	Middle Age Adult	Yes	Right Side	Flexed	SI	Cemetery	NE	SE to NW
McLemore ^{1,2}	16	1	NO	Infant	Yes			SI	Cemetery		E to W
McLemore ^{1,2}	17	1	NO	Child	No	Right Side	Flexed	SI	Cemetery		E to W
McLemore ^{1,2}	18	1	NO	Infant	Yes	Back	Flexed	SI	Cemetery	U	NE to SE
McLemore ^{1,2}	19	1	NO	Infant	Yes			SI	Cemetery	D	E to W
McLemore ^{1,2}	20	1	F	Young Adult	Yes	Stomach	Flexed	SI	Cemetery	S	E to W
McLemore ^{1,2}	21	1	NO	Infant	Yes			SI	Cemetery		
McLemore ^{1,2}	22	1	M	Young Adult	Yes	Back	Flexed	SI	Cemetery	U	E to W
McLemore ^{1,2}	23	1	F	Young Adult	No	Back	Flexed	SI	Cemetery	U	E to W
McLemore ^{1,2}	24	1	F	Young Adult	No	Left Side	Flexed	SI	Cemetery	S	E to W
McLemore ^{1,2}	25	1	NO	Infant	Yes	Back	Extended	SI	Cemetery	U	E to W
McLemore ^{1,2}	26	1	NO	Child	Yes	Back		SI	Cemetery	U	E to W

Table 7 Continued.

Site	Burial #	# of Individuals	Sex	Age Class	Grave Goods	Deposition	Position	Facility	Location	Skull Facing	Orientation
McLemore ^{1,2}	27A	2	F	Young Adult	Yes	Back	Flexed	SI	Cemetery	U	E to W
McLemore ^{1,2}	27B		NO	Infant	Yes			SI	Cemetery		
McLemore ^{1,2}	28	1	NO	Infant	Yes	Left Side	Flexed	SI	Cemetery	S	E to W
McLemore ^{1,2}	29	1	NO	Infant	No	Back	Extended	SI	Cemetery	D	E to W
McLemore ^{1,2}	30A	2	F	Middle Age Adult	Yes	Right Side	Flexed	SI	Cemetery	N	E to W
McLemore ^{1,2}	30B		F	Middle Age Adult	Yes			SI	Cemetery		E to W
McLemore ^{1,2}	31	1	NO	Infant	Yes			SI	Cemetery		
McLemore ^{1,2}	32	1	NO	Infant	No	Left Side	Flexed	SI	Cemetery	SW	NE to NW
McLemore ^{1,2}	33	1	M	Middle Age Adult	No	Left Side	Flexed	SI	Cemetery	SW	E to W
McLemore ^{1,2}	34	1	M	Middle Age Adult	Yes	Back	Flexed	SI	Cemetery	U	E to W
McLemore ^{1,2}	35	1	NO	Infant	No			SI	Cemetery		
McLemore ^{1,2}	36	1	NO	Infant	Yes	Back	Flexed	SI	Cemetery	U	E to W
McLemore ^{1,2}	37	1	NO	Child	Yes	Back	Extended	SI	Cemetery	S	E to W
McLemore ^{1,2}	38	1	NO	Infant	No			SI	Cemetery		
McLemore ^{1,2}	39	1	NO	Infant	Yes			SI	Cemetery	S	E to W
McLemore ^{1,2}	40	1	NO	Infant	Yes	Left Side	Extended	SI	Cemetery	U	E to W
McLemore ^{1,2}	41	1	NO	Infant	No	Left Side	Flexed	SI	Cemetery		E to W
McLemore ^{1,2}	42	1	NO	Infant	No	Back	Flexed	SI	Cemetery		E to W
McLemore ^{1,2}	43	1	NO	Infant	No	Left Side	Flexed	SI	Cemetery	U	E to W
McLemore ^{1,2}	44	1	NO	Child	No	Left Side	Flexed	SI	Cemetery		E to W
McLemore ^{1,2}	45	1	M	Middle Age Adult	Yes	Back	Flexed	SI	Cemetery		E to W
McLemore ^{1,2}	46	1	F	Young Adult	No			SI	Cemetery		E to W
McLemore ^{1,2}	47	1	F	Young Adult	Yes	Left Side	Flexed	SI	Cemetery	S	E to W
McLemore ^{1,2}	48	1	NO	Infant	Yes			SI	Cemetery	U	E to W
Grant ³	1	1	F	Middle Age Adult	No	Stomach	Extended		Cemetery	E	E to W
Grant ³	2	1	M	Middle Age Adult	Yes	Left Side	Flexed		Cemetery	E	E to W
Grant ³	3	1	NO	Infant	No	Back	Flexed		Cemetery	E	E to W
Grant ³	4	1	NO	Child	No	Left Side	Flexed		Cemetery	W	W to E

Table 7 Continued.

Site	Burial #	# of Individuals	Sex	Age Class	Grave Goods	Deposition	Position	Facility	Location	Skull Facing	Orientation
Grant ³	6	1	NO	Infant	No	Back	Flexed		Cemetery	E	E to W
Grant ³	7	1	NO	Infant	No	Left Side	Flexed		Cemetery	S	N to S
Grant ³	10	1	M	Unknown Adult	No	Stomach	Flexed		Cemetery	S	N to S
Heerwald ^{4,5}	1A	3	M	Young Adult	Yes	Left Side	Flexed	SI	Isolated		
Heerwald ^{4,5}	1B		NO	Infant	Yes			SI	Isolated		
Heerwald ^{4,5}	1C		NO	Child	Yes	Back	Extended	SI	Isolated		

Data from: 1. Pillaert 1963; 2. Brues 1962; 3. Sharrock 1961; 4. Shaeffer 1965; 5. Brues 1965.

Skull facing

41 of the 62 individuals (66%) had data concerning the direction the skull was facing (Table 7). Of these, 17 (41%) were facing upwards, three were facing down (7%), 12 were facing south (29%), five facing east (9%), two were facing southwest (5%). Additionally, one skull was facing north, west, and northeast each (2%).

Grave Goods

Grave goods were found in 31 of 57 graves (54%) (Table 8). Burial inclusions were mostly simple with few burials having a large amount of accompanying artifacts. Local and non-local goods were interred in graves. Common artifacts found in burial contexts include: undecorated pottery, side scrapers, shell scrapers, projectile points, various bone tools, worked deer mandibles, and various types of flint knives. Artifacts from non-local sources include: a human effigy bowl, Caddoan pottery, olivella shell beads, pieces of steatite, and conch shell gorgets (Vehik 2002). Of the 31 individuals who had associated grave goods. 14 (41%) were infants, two were children (6%), one adolescent (3%), seven were young adults (23%), and seven were middle aged adults (23%). Most burials were interred with only local materials. 21 out of 31 (68%) had only locally manufactured associated artifacts. Burials with only non-local goods were rare at three out of 31 (9%). seven (23%) burials had grave goods that were manufactured both locally and non-locally and from non-local resources (Table 9).

Table 8: Washita River Distribution of Grave Goods.

Sex	Age	Present	Not Present	Total
	Infant	14	17	31
	Child	2	5	7
	Adolescent	1	0	1
Males	Young Adult	2	2	4
	Middle Age Adult	4	1	5
	Older Adult	0	0	0
	Unknown Adult	0	1	1
Females	Young Adult	5	2	7
	Middle Age Adult	3	3	6
	Older Adult	0	0	0
	Unknown Adult	0	0	0

Table 9: Washita River Grave Goods.

Site	Burial Number	Age Class	Sex	Grave Goods	Grave Good Type
McLemore ¹	2	Middle Age Adult	F	Pointed scraper	Local
McLemore ¹	6	Infant		Shell scraper	Local
McLemore ¹	7	Young Adult & Infant	F	Harrell point	Local
McLemore ¹	8	Infant		Human effigy pottery vessel	Non Local
McLemore ¹	9	Adolescent		Stafford Plain Pottery Vessel, Figurines, and some Steatite	Both
McLemore ¹	10	Young Adult	M	Stafford Plain Pottery Vessel	Local
McLemore ¹	11	Infant		Stafford Plain Pottery Vessel, cannon-bone awl, unworked mussel shell, 10 pieces of steatite	Both
McLemore ¹	14	Middle Age Adult	M	Stone elbow Pipe, Washita point	Local
McLemore ¹	15	Middle Age Adult	F	Decorated Pottery Vessel, Scapula Hoe, Worked Deer mandible, Triangular knife, 7 pieces of steatite	Both
McLemore ¹	16	Infant		Decorated Pottery Vessel	Local
McLemore ¹	18	Infant		Scapula hoe	Local
McLemore ¹	19	Infant		4 Burned Rocks	Local
McLemore ¹	20	Young Adult	F	Stafford Plain vessel, worked bone	Local
McLemore ¹	21	Infant		1 shell scraper and 1 unworked mussel shell	Local
McLemore ¹	22	Young Adult	M	Stafford Plain Vessel	Local
McLemore ¹	25	Infant		Decorated Pottery Vessel, Mussel shell	Local
McLemore ¹	26	Child		1 shell scraper and 1 unworked mussel shell	Local
McLemore ¹	27	Young Adult & Infant	F	2 Stafford Plain Vessels, unworked mussel shell, 2 worked deer mandibles, shell gorget	Both
McLemore ¹	28	Infant		16 pieces of steatite	Non Local
McLemore ¹	30	2 Middle Age Adults	F/F	2 Mussell shells	Local
McLemore ¹	31	Infant		Mano, 2 unworked mussel shells	Local

Table 9 Continued.

Site	Burial Number	Age Class	Sex	Grave Goods	Grave Good Type
McLemore ¹	34	Middle Age Adult	M	Decorated Pottery Vessel, Flint scraper, unworked mussel shell, 2 flat split bone awls, 3 Washita points, 1 Harrell point, 1 Huffaker point, 3 flint scrapers, 4 flint knives, shell scraper, lump of raw clay, piece of selenite	Both
McLemore ¹	36	Infant		121 Shell Beads	Non Local
McLemore ¹	37	Child		Stafford Plain vessel, 430 shell beads	Both
McLemore ¹	39	Infant		Stafford Plain Vessel	Local
McLemore ¹	40	Infant		Flint scraper, 2 unworked mussel shells	Local
McLemore ¹	45	Middle Age Adult	M	Stone Pipe	Local
McLemore ¹	47	Young Adult	F	Stafford Plain Vessel, Harahey knife, Triangular knife, 3 unworked mussel shells	Local
McLemore ¹	48	Infant		Unworked mussel shell	Local
Grant ²	2	Middle Age Adult	M	Undecorated bowl	Local
Heerwald ³	1A	Young Adult	F		
Heerwald ³	1B	Infant		1 Arrow Point, 1 Shell Button, Several flakes, partially finished SS, Lindsay Plain sherd in Fill	Both
Heerwald ³	1C	Child			

Data From: 1. Pillaert 1963; 2. Sharrock 1961; 3. Shaeffer 1965.

Buried City Complex

The buried city complex sample consists of 37 burials representing 42 individuals.

Age

41 of 42 individuals had at least some age related data (Table 10). 13 (32%) of these individuals were classified as sub-adults and 28 (68%) were classified as adults. In the sub-adult category seven (17%) were infants, four (9%) were children, and 2 (5%) were adolescents. The adult category has a distribution of nine young adults (22%), six middle age adults (15%), and 13 older adults (32%).

Sex

Data on sex is available for 28 (66%) individuals (Table 10). 10 of these 28 were male (36%) and 18 were female (64%).

Table 10: Buried City Complex Demographics.

Age	Adult Age Distribution			Total	Juvenile Age Distribution	
	Male	Female	Unknown		Age	Total
Young Adult	2	7		9	Infant	7
Middle Age Adult	2	4		6	Child	4
Older Adult	6	7		13	Adolescent	2
Unknown			1	1		
Total	10	18	1	29	Total	13

Facility

34 (92%) of the 37 burials had data relating to the nature of the mortuary facility (Table 11). All of the buried city burials had at least some use of stone in construction of the burial. 13 of these were interred with some use of stone (38%) and 21 burials were interred with a more complex use of stone (62%).

Table 11: Buried City Complex Mortuary Data.

Site	Burial #	# of Individuals	Sex	Age Class	Grave Goods	Deposition	Position	Facility	Location	Skull Facing	Orientation
Harold's Pivot Field ¹	1	1	F	Older Adult	No		Extended	SS	Isolated	D	
Harold's Pivot Field ¹	2	1	F	Older Adult	No		Flexed	SS	Isolated		
Buried City ¹	1	1	F	Young Adult	No				Isolated		
Buried City ¹	2	1	M	Middle Age Adult	No				Isolated		
A180 ²	1	1	M	Older Adult	Yes	Left Side	Flexed	SS	NS	W	
A180 ²	2	1	F	Middle Age Adult	Yes			SS	NS		
A180 ²	3	1	F	Older Adult	Yes			SS	NS		
A180 ²	4	1	F	Older Adult	Yes			SS	NS		
A180 ²	5	1	M	Young Adult	Yes			SS	NS		
A180 ²	6	1	M	Middle Age Adult	Yes			SS	NS		
A180 ²	7	1	M	Older Adult	Yes			SS	NS		
A180 ²	8	1	F	Middle Age Adult	Yes			SS	NS		
A180 ²	9	1	F	Middle Age Adult	Yes			SS	NS		
A546 ^{3,4}	S1	1	M	Older Adult				Surface	Cemetery		
A546 ^{3,4}	S2	1	NO	Child				Surface	Cemetery		
A546 ^{3,4}	S3	1	F	Older Adult				Surface	Cemetery		
A546 ^{3,4}	S4	1						Surface	Cemetery		
A546 ^{3,4}	1	1	F	Older Adult		Right Side	Flexed	SS	Cemetery		SE to NW
A546 ^{3,4}	2	1	NO	Adolescent	Yes	Stomach	Extended	SS	Cemetery	SE	NW to SE
A546 ^{3,4}	3	1	M	Older Adult	Yes	Back	Flexed	CS	Cemetery		E to W
A546 ^{3,4}	4	1	M	Older Adult					Cemetery		
A546 ^{3,4}	5	1	F	Middle Age Adult					Cemetery		
A227 ⁵	1A	2	NO	Child	Yes	Back	Flexed	CS	Cemetery	N	E to W
A227 ⁵	1B		NO	Infant	Yes	Back	Flexed	CS	Cemetery	N	E to W
A227 ⁵	Pit 1	1	NO	Infant	Yes			CS	Cemetery		
A227 ⁵	Pit 3	1	NO	Infant	Yes	Back	Flexed	CS	Cemetery		
A227 ⁵	Pit 4	1	NO	Infant	No			CS	Cemetery		

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Table 11 Continued.

Site	Burial #	# of Individuals	Sex	Age Class	Grave Goods	Deposition	Position	Facility	Location	Skull Facing	Orientation
A227 ⁵	Pit 6A	2	NO	Child	Yes	Right Side	Flexed	CS	Cemetery	W	
A227 ⁵	Pit 6B		F	Young Adult	Yes	Right Side	Flexed	CS	Cemetery	W	
A227 ⁵	Pit 14A	3	M	Older Adult	Yes	Right Side	Flexed	CS	Cemetery	E	S to N
A227 ⁵	Pit 14B		F	Young Adult	Yes	Right Side	Flexed	CS	Cemetery	E	S to N
A227 ⁵	Pit 14C		NO	Infant	Yes	Right Side	Flexed	CS	Cemetery	E	S to N
A227 ⁵	Pit 15	1	F	Young Adult	No			CS	Cemetery		
A227 ⁵	Pit 16	1	F	Adolescent	No	Back	Flexed	CS	Cemetery	U	N to S
A227 ⁵	Pit 17	1	F	Young Adult	Yes	Back		CS	Cemetery	E	S to N
A227 ⁵	Pit 18	1	NO	Infant				CS	Cemetery		
A227 ⁵	Pit 19A	2	NO	Infant	Yes			CS	Cemetery	E	
A227 ⁵	Pit 19B		F	Older Adult	Yes	Right Side	Flexed	CS	Cemetery	E	
Courson B ^{6,7,1}	1	1	F	Young Adult	Yes	Stomach	Flexed	CS	Structure	S	E to W
Courson B ^{6,7,1}	2	1	NO	Child	Yes			CS	Structure		
Courson B ^{6,7,1}	4	1	M	Young Adult	Yes			CS	Structure		
Courson B ^{6,7,1}	5	1	F	Young Adult	Yes	Left Side	Flexed	CS	Structure	E	N to S

Data from: 1. Moore-Jansen 1991; 2. J Hughes 1955; 3. J Hughes 1962; 4. Taylor 1996; 5. J Hughes 1957; 6. Dembieki 1987; 7. D Hughes and Hughes-Jones 1987.

Deposition

Data concerning the deposition of the body in the grave was available for 17 (40%) of the buried city sample (Table 11). Of these 17, seven (41%) were deposited on their right side. Two (12%) were deposited on their left side. Six (35%) were deposited on their back and two more (12%) were deposited on their stomach.

Position

Positional information was available for 18 (43%) of the sample (Table 11). Of these 18, 16 were in a flexed position (89%) and two (11%) were in an extended position.

Location

Information regarding the location of the graves was available for all 42 burials (Table 11). In this sample 25 (60%) were found in cemetery areas. Four burials were found in structures (10%). Another four were found in isolated contexts (10%). Nine burials were recovered from a natural rock shelter (20%).

Orientation

Orientation information was available for 12 (29%) of the sample (Table 11). Four of these were oriented east to west (33%). Five (42%) were oriented south to north and two (17%) were oriented north to south. Finally, one (8%) was oriented southeast to northwest.

Skull Facing

Information regarding the direction the skull was facing was available for 11 (26%) of the sample (Table 11). In seven of these the skull was facing east (64%). In

three the skull was facing west (27%). Two more skulls were facing north (18%). Finally one skull was found facing south, up, down, and southeast (9%) each.

Grave Goods

Grave goods were found in 13 out of 37 burials in the buried city sample (35%), with 18 out of 42 individuals (43%) having grave goods associated with them (Table 12). The buried city burials contained artifacts made both locally and non-locally. Artifacts made locally generally found are: pottery, various types of flint knives, miscellaneous worked flint, seeds, grinding stones, local shell, charcoal, various worked and unworked bone, and Bison tibia and metapodial tools. Artifacts found of non-local origin include: olivella shell, disk beads, modified and unmodified conch shells, black polished stone, various non-local stone raw material, and stone pendants. Of the 18 individuals with associated grave goods five were infants (28%), three were children (17%), one adolescent (5%), six young adults (33%), and three older adults (16%).

Nine of the burials contained only locally made artifacts (69%), one was buried with only non-locally produced goods (7%), and three contained both (23%) (Table 13). Site A180 contained both local and non-locally made artifacts, but none of the artifacts could be clearly linked to specific burials.

Table 12: Buried City Distribution of Grave Goods.

Sex	Age	Present	Not Present	Total
Males	Infant	5	2	7
	Child	3	1	4
	Adolescent	1	1	2
	Young Adult	1	1	2
	Middle Age Adult	0	2	2
Females	Older Adult	2	4	6
	Young Adult	5	2	7
	Middle Age Adult	0	4	4
	Older Adult	1	6	7

Table 13: Buried City Grave Goods.

Site	Burial Number	Age Class	Sex	Grave Goods	Grave Good Type
A180 ¹		Older Adult	M		
A180 ¹		Middle Age Adult	F		
A180 ¹		Older Adult	F	Many tubular beads of conch, shell, and bone; 3 flint caches; ovate, leaf, lanceolate shaped flint knives; 8 end scrapers; several worked flakes; numerous olivella shell beads; 1 round catilinite pendant; pottery sherds; triangle notched and unnotched points; flint blade; purple, yellow, and green pigments; disk shaped fragments; 2 incised oval pendants; bone awl.	Both
A180 ¹		Older Adult	F		
A180 ¹		Young Adult	M		
A180 ¹		Middle Age Adult	M		
A180 ¹		Older Adult	M		
A180 ¹		Middle Age Adult	F		
A180 ¹		Middle Age Adult	F		
A546 ²	2	Adolescent		Oval Flint knife, decorated rim sherd	Local
A546 ²	3	Older Adult	M	1 fine alternately beveled flint knife, 4 modified conch shells, perforated shell, 1 oval camazonite disk bead, multiple shell disk beads, 10 distinct strands of disk beads and olivella shells.	Both
A227 ³	1A	Child			
A227 ³	1B	Infant		2 Bison scapulas	Local
A227 ³	Pit 1	Infant		Several cord marked pottery sherds	Local

Table 13 Continued.

Site	Burial Number	Age Class	Sex	Grave Goods	Grave Good Type
A227 ³	Pit 3	Infant		Bison tibia hoe	Local
A227 ³	Pit 6A	Child		2 bone tibiae scapula tools, 1 clumella shell beads.	Both
A227 ³	Pit 6B	Young Adult	F		
A227 ³	Pit 14A	Older Adult	M	1 flint scraper, metapodial hoe, many small shell disk beads, 6 tubular conch shell beads, spear point.	Both
A227 ³	Pit 14B	Young Adult	F		
A227 ³	Pit 14C	Infant			
A227 ³	Pit 17	Young Adult	F	Bison metapodial spade	Local
A227 ³	Pit 19A	Infant		50 disk shell beads, 43 other small shell beads.	Non Local
A227 ³	Pit 19B	Older Adult	F		
Courson B ⁴	1	Young Adult	F	Several seeds, burned and unburned bone, broken piece of worked flint, 3 pottery sherds, shell fragments.	Local
Courson B ⁴	2	Child		Black polished stone, 2 pieces of charcoal	Local
Courson B ⁴	4	Young Adult	M	Various bird bones, 1 worked flint chip, 4 shell fragments, 3 pottery fragments.	Local
Courson B ⁴	5	Young Adult	F	Worked flint, bird vertebra, charcoal, broken grinding stone, shell fragments.	Local

Data From: 1. J Hughes 1955; 2. J Hughes 1962; 3. J Hughes 1957; 4. Dembieki 1987.

Henrietta complex

The Henrietta complex has a sample comprised of 29 burials that contain 44 individuals.

Age

Age data was accessible for 12 of the 44 individuals (27%) (Table 14). Five of these were infants (42%). Three were young adults (25%), two were middle aged adults (17%), and two more were older adults (17%).

Sex

Seven individuals had age related data associated with them (16%) (Table 14). Four of these were male (57%) and three were female (43%).

Table 14: Henrietta Complex Demographics.

Age	Adult Age Distribution			Total	Juvenile Age Distribution	
	Male	Female	Unknown		Age	Total
Young Adult	1	2	0	3	Infant	0
Middle Age Adult	1	1	0	2	Child	5
Older Adult	2	0	0	2	Adolescent	0
Unknown	0	0	1	1		
Total	4	3	1	8	Total	5

Facility

All of the burials in the Henrietta complex were buried with some stone in the construction of the mortuary facility but not the complex and extensive use of stone that are seen in antelope creek and buried city burials (Tables 15, 16).

Table 15: Henrietta Complex Mortuary Data.

Site	Burial #	# of Individuals	Sex	Age Class	Grave Goods	Deposition	Position	Facility	Location	Orientation
Dillard ^{1,2}	1	1		Child	Yes	Right Side	Flexed	SS	Cemetery	E to W
Dillard ^{1,2}	2	1		Child	Yes	Stomach	Flexed	SS	Cemetery	E to W
Dillard ^{1,2}	3	1	M	Older Adult	Yes	Back	Flexed	SS	Cemetery	
Dillard ^{1,2}	4	1		Child	Yes		Flexed	SS	Cemetery	W to E
Dillard ^{1,2}	5	1	M	Older Adult	No	Right Side	Flexed	SS	Cemetery	
Dillard ^{1,2}	6	1		Unknown	Yes	Back		SS	Cemetery	
Dillard ^{1,2}	7A	2		Child	No	Left Side		SS	Cemetery	E to W
Dillard ^{1,2}	7B/13			Child	No			SS	Cemetery	E to W
Dillard ^{1,2}	8(A)	5	F	Young Adult	Yes	Stomach	Extended	SS	Cemetery	E to W
Dillard ^{1,2}	8(B)		M	Middle Age Adult	Yes	Stomach	Extended	SS	Cemetery	E to W
Dillard ^{1,2}	8(C)		M	Young Adult	Yes	Stomach	Extended	SS	Cemetery	E to W
Dillard ^{1,2}	8(D)		F	Young Adult	Yes	Stomach	Extended	SS	Cemetery	E to W
Dillard ^{1,2}	8(E)		F	Middle Age Adult	No	Stomach	Extended	SS	Cemetery	E to W

Data from: 1. Martin 1994; 2. Albrecht 1994.

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Table 16: Harrell Site Summary Mortuary Data.

Site	Burial #	# of Individuals	Deposition	Position	Orientation
Harrell*	18 Single internments	18	13 Right Side	21 Flexed	11 W to E
	Multiple Burial	3	8 Left Side	1 Sitting	5 SW to NE
	Multiple Burial	5		1 Bundle	2 E to W
	Multiple Burial	6			1 NE to SW

*Data From J Hughes (1946).

Deposition

32 burials had depositional information from the burials (72%)(Table 15) . 15 of these were deposited on their right side (47%). Nine were on their left side (28%). Six were found on their stomachs (19%) and two (6%) were found on their back.

Position

33 burials (75%) of the sample had information pertaining to the position of the body in the grave (Table 15). 26 of these were in a flexed position (79%), five were in an extended position (15%), and two more where in other positions (6%).

Location

All of the Henrietta complex burials were interred in a separate cemetery area. However, both sites had been occupied by later groups of people.

Orientation

29 (66%) of the burials had orientation information available (Table 15) . Of these 11 (38%) were oriented east to west, 12 (41%) were oriented west to east, five (17%) were oriented southwest to northeast, and one (3%) was oriented northeast to southwest.

Skull Facing

None of the burials in the Henrietta complex sample had information indicating the direction the skull was facing.

Grave Goods

Specific grave good associations could only be made for nine (20%) of the sample (Table 17). Both local and non-locally made artifacts were found interred with individuals. Some locally made items include: projectile points, local shell, and tubular

bone bead. Non-locally made artifacts are much more frequently found and include: drilled disk beads, conch shell gorgets and beads, olivella shell beads, and columella shell beads. Of these nine individuals with grave goods three (33%) were children, three were adult males (33%), and two were adult females (22%), and one unknown individual (11%). Only two of the burials had exclusively locally made artifacts while the remaining seven had only non-locally made artifacts (Table 18).

Table 17: Henrietta Complex Grave Good Distributions.

Sex	Age	Present	Not Present	Total
	Infant	0	0	0
	Child	3	2	5
	Adolescent	0	0	0
Males	Young Adult	1	0	1
	Middle Age Adult	1	0	1
	Older Adult	1	1	2
Females	Young Adult	2	0	2
	Middle Age Adult	0	1	1
	Older Adult	0	0	0
Unknown	Unknown	1	0	1

Table 18: Henrietta Complex Grave Goods.

Site	Burial Number	Age Class	Sex	Grave Goods	Grave Good Type
Dillard ¹	1	Child		3 roughly finished projectile points.	Local
Dillard ¹	2	Child		Strand of drilled disk beads, double drilled engraved gorget made of whelk shell carved in the shape of a hand.	Non Local
Dillard ¹	3	Older Adult	M	3 olivella shell beads and 4 small drilled columella beads.	Non Local
Dillard ¹	4	Child		Necklace consisting of 405 small drilled shell disk beads around the Neck.	Non Local
Dillard ¹	6	Unknown		Tubular bone bead.	Local
Dillard ¹	8A	Young Adult	F	40 olivella shell beads.	Non Local
Dillard ¹	8B	Middle Age Adult	M	Numerous olivella beads and conch beads.	Non Local
Dillard ¹	8C	Young Adult	M	2 conch beads.	Non Local
Dillard ¹	8S	Young Adult	F	Bracelet of 43 olivella beads, hundreds more throughout	Non Local

Data from: 1. Martin 1994.

Zimms Complex

The Zimms complex is only represented by eight burials containing eight individuals.

Age

Age related data was available for all eight of the burials from the zimms complex (Table 19). Only one juvenile is represented in the sample in the form of a child. One young adult was represented, three middle age adults are represented, and three more adults of unknown age represent the adults.

Sex

In this sample four of the adults had data for sex (Table 19). Three of these were male and one female were represented in this sample.

Facility

All eight burials in the Zimms complex were simple internments (Table 19). No use of stone was used in the mortuary facility. Evidence instead of the use of woven mats and fire are found in five (62%) of the burials.

Table 19: Zimms Complex Mortuary Data.

Site	Burial #	# of Individuals	Sex	Age Class	Grave Goods	Deposition	Position	Facility	Location	Orientation
New Smith ¹	1	1	M	Middle Age Adult	No		Flexed	SI	Structure	E to W
New Smith ¹	2	1		Child	Yes	Right Side	Flexed	SI	Structure	NE to SE
New Smith ¹	3	1	F	Middle Age Adult	Yes	Back	Flexed	SI	Isolated	E to W
Hedding ²	Pit 4	1		Unknown Adult	Yes			SI	Isolated	
Hedding ²	Pit 5	1		Middle Age Adult	No			SI	Isolated	
Wickham #3 ³	1	1	M	Unknown Adult	Yes	Left Side	Flexed	SI	Isolated	SE to NW
Wickham #3 ³	2	1	M	Young Adult	No			SI	Isolated	
Wickham #3 ³	3	1		Unknown Adult	No			SI	Isolated	

Data From: 1. Brooks et al. 1991; 2. Shaeffer 1965; 3. Wallis 1984.

Deposition

Due to most of the graves being disturbed, only three burials (38%) had information on the deposition of the body (Table 19). One individual was found on its right side, one on its left side, and one on its back.

Position

Half of the burials had data regarding the position of the body. In all four cases the bodies were in a flexed position (Table 19).

Location

Of the eight burials in the Zimms complex, six were found in isolated contexts and two were found in possible arbor like structures.

Orientation

Four burials had information regarding the orientation of the body. Two were oriented east to west. One was oriented northeast to southeast and the last one was oriented in a southeast to northwest direction.

Skull Facing

None of the burials in the Zimms complex sample had any information regarding the direction of the skull.

Grave Goods

Four burials had grave goods associated with them (Table 20). Locally made and non-locally made artifacts are found in burial contexts. Locally made items include: Bison metatarsal, turtle humerus, flint projectile points, pottery sherds, alternately beveled knives, bone beads, and basin metates. Objects made from non-local resources or made non-locally include: olivella shell, quartzite cobbles, mussel shell, and conch shell. One was a child, and three were adults. Two of the burials contained only locally made artifacts and the other two contained both local and non-local artifacts.

Table 20: Zimms Complex Grave Goods.

Site	Burial Number	Age Class	Sex	Grave Goods	Grave Good Type
New Smith	2	Child		77 Olivella shell beads, several mussel shell fragments, 2 burned quartzite cobble sections, 1 bison metatarsal, 1 turtle humerus.	Both
New Smith	3	Middle Age Adult	F	Alternate beveled knife, smooth surface pottery sherd, several mussel shell fragments.	Both
Hedding	Pit 4	Unknown Adult		Basin metate.	Local
Wickham #3	1	Unknown Adult	M	3 Projectile points, cut shell, charred logs and grass, conch shell fragments, 1 shell bead, 1 bone bead, mat.	Both

Summary of Mortuary Data

One of the major distinctions observed is the use of stone in the mortuary facility. The groups in Texas, especially in the panhandle, use stone to varying degrees when burying the dead. The use of stone is absent in the Washita River phase and Zimms complex of Oklahoma. The Washita River phase buries their dead in simple pits. The Zimms complex, which shows a mixture of Washita River and Antelope Creek traits, shows evidence of a mortuary facility that is distinct from any of the other southern plains groups. Evidence from the New Smith site shows evidence for two burials inside of an arbor like structure and the burials being surrounded by small pits with faunal remains in them which has been interpreted to be representative of a mortuary feast (Brooks et al. 1991). Additionally, the use of woven mats in burials along with the intentional use of fire is not observed in any of the other four groups.

The deposition of the body in the mortuary facility is fairly consistent among the five groups (Table 21). All groups show similar distribution of burial deposition. All groups have the majority of their dead deposited either on their right side, left side, or back. Individuals deposited on their stomach represented a minority in all of the groups. All five of the groups exhibit similar ways of positioning the body as well.

Burials being flexed are the dominant position in every group with the extended position having the next highest frequency of occurrence (Table 21). Burials found in other positions such as sitting or bundle burials are very rare, as the burial positions preferred in the southern plains groups is fairly consistent.

Table 21: Southern Plains Burial Deposition.

	Right Side	Left Side	Back	Stomach	Other
Antelope Creek	16/54: 30%	13/54: 24%	15/54: 28%	6/54: 11%	2/54: 4%
Washita River	6/48: 13%	17/48: 35%	21/48: 44%	4/48: 8%	
Buried City	7/17: 41%	2/17: 12%	6/17: 35%	2/17: 12%	
Henrietta	15/32: 47%	9/32: 28%	2/32: 6%	6/32: 19%	
Zimms	1/3: 33%	1/3: 33%	1/3: 33%		

Table 22: Southern Plains Burial Positions.

	Flexed	Extended	Other
Antelope Creek	44/50: 88%	4/50: 8%	2/50: 4%
Washita River	40/47: 85%	7/47: 15%	
Buried City	16/18: 89%	2/18: 11%	
Henrietta	26/33: 79%	5/33: 15%	2/33: 6%
Zimms	4/4: 100%		

Burials are generally located in separate cemetery areas (Table 23). They do however; also occur in isolated contexts within the habitation areas such as in middens. One exception of this is the Antelope Creek phase where the majority of burials in the sample were found inside of a structure. This is misleading because the majority of the burials found in structures such as at Antelope Creek 22 and 22A were placed there after the structure was abandoned and were likely used as a cemetery area by adjacent sites. There also were reports by archaeologists Warren Moorehead and Floyd Studer in the early 1900s during surveys of many possible cemetery areas located adjacent to

sites that were never extensively explored. The Buried city Complex site burials from A180 represent the only burials in the entire sample found in a natural rock shelter. The Henrietta complex burials are also obscured because both sites had occupations by later groups imposed on top of the burials.

Table 23: Distribution of Burial Locations.

	Cemetery	Structure	Isolated	Natural Shelter
Antelope Creek	14/71: 20%	52/71: 73%	5/71: 7%	
Washita River	59/62: 95%		3/62: 5%	
Buried City	25/42: 60%	4/42: 10%	4/42: 10%	9/42: 20%
Henrietta	45/45 100%			
Zimms	6/8: 75%	2/8: 25%		

Burials can be oriented from almost any direction (Table 24). The most common directions burials are oriented in are east to west. Antelope Creek shows the most diversity in orientations, with east to west and north to south being the most common. The Washita River burials show the most consistency with the sample being dominated by an east to west orientation but this is likely due to the sample being mostly from one cemetery. The Buried City sample is very small as many burials did not have specific orientation information. Most of the burials in the sample are in an east to west and south to north direction. Other orientations do occur in the sample and reports by archaeologists working in the field have commented that orientations vary widely (Hughes and Hughes-Jones 1987). Burials in the Henrietta focus mostly are oriented either east to west and from west to east. The Zimms complex had very little data on orientations.

Table 24: Orientation Distributions.

	Antelope Creek	Washita River	Buried City	Henrietta	Zimms
E to W	12/42: 29%	42/53: 79%	4/12: 33%	11/29: 38%	1/2: 50%
W to E	3/42: 7%	1/53: 2%		12/29: 41%	
S to N	3/42: 7%	2/53: 4%	5/12: 42%		
N to S	14/42: 33%	2/53: 4%	2/12: 17%		
NW to SW	2/42: 5%				
NW to SE	1/42: 2%				
NE to SW		1/53: 2%		1/29: 3%	
NE to SE	1/42: 2%	1/53: 2%			
SW to NE				5/29: 17%	
SW to NW	2/42: 5%				
SE to NW	4/42: 10%	5/53: 9%	1/12: 8%		1/2: 50%

The direction the skull faces in the burial is the most poorly documented trait in the sample. Both the Henrietta and Zimms complexes did not have any data available. The Washita and Antelope Creek phases had the most documentation and the direction the skull faced was variable and consistent with the orientation of the body (Table 25). In the Antelope Creek phase the majority of the skulls faced east or west. The Washita River phase sample had the greatest amount of skulls facing upwards, which reflects the higher amount of individuals deposited on their backs. The second highest number of individuals have their skulls facing south. The Buried City complex sample also reflects a diversity of directions the skull was placed. The majority of skulls in the sample faced east, west, or north. The lack of adequate sample size hampers any real characterization or patterns of this trait.

The mortuary facility shows a clear dichotomy between groups that occupy Oklahoma and those that occupy Texas (Table 26). The Antelope Creek phase and the buried city and Henrietta complexes all have stone being utilized in the majority of graves. In the case of antelope creek and buried city, often the burials will include a

large amount of stone in the form of large amounts of variously sized rocks or large slabs that are placed over the burial. The Washita river phase has only displayed burials that are shallow pits dug into the ground. Zimms complex graves also are simple pits, but there is evidence that an arbor like structure was used at the Zimms site (Brooks et al. 1991).

Table 25: Distribution of Direction of Skull Facing.

	Antelope Creek	Washita River	Buried City	Henrietta	Zimms
East	7/21: 33%	5/41: 9%	7/11: 64%		
West	4/21: 19%	1/41: 2%	3/11: 27%		
North	1/21: 5%	1/41: 2%	2/11: 18%		
South	1/21: 5%	12/41: 29%	1/11: 9%		
northeast	3/21: 14%	1/41: 2%			
Southwest	1/21: 5%	2/41: 5%			
Southeast			1/11: 9%		
Up	2/10: 10%	17/41: 41%	1/11: 9%		
Down	2/10: 10%	3/41: 7%	1/11: 9%		

Table 26: Distribution of Mortuary Facility.

	Simple Internment	Simple Stone	Complex Stone
Antelope Creek	13/69: 19%	27/69: 39%	29/69: 42%
Washita River	62/62: 100%		
Buried City		13/34: 38%	21/34: 62%
Henrietta		47/47: 100%	
Zimms	8/8: 100%		

CHAPTER FIVE

DISCUSSION

Limitations of the Sample

One major hurdle that has prevented mortuary data from having a more expanded role in research on the Late Prehistoric Southern Plains is the nature of the sample. First and foremost the sample size for these populations is far below the amount of burials recovered from other areas. This study is no different in that respect. Limitations in recovery, looting, and at times limited data recording have played a major role in the limits of the number of skeletal material recovered. This presents a problem as the number of individuals recovered is far below the population levels that are thought to have inhabited the region at the time.

Furthermore, excavation bias leads to differential recovery of individuals. This limitation on sample size makes more in depth discussion of the material not feasible. Larger cultural interpretation of the data will not be supported with such a small sample. Second, comparisons between these cultures are hampered by grossly uneven number of samples between the groups. The Antelope Creek phase is best represented with the largest sample size and the greater diversity of sites sampled. While the Zimms complex is only represented by eight burials from three sites. Lastly, the sample itself is not evenly documented as different projects had different goals or time for excavation and description.

Finally, and most importantly, the sample consists of data that was characterized by multiple observers. This has effects on the demographics of the sample. Sex and

age have been assessed by multiple observers using different standards. This creates a potential in intra observer error

Noting these limitations, data collected in this study will be summarized with only tentative discussion of what the sample represents. Further work is needed on sites that contain mortuary data to increase the sample so more comprehensive discussion can be completed. With stronger data mortuary behavior can contribute, combined with archaeological data, to greater understanding of these late prehistoric cultural complexes.

Distribution of Trade Goods in Burial Contexts

Trade goods show up consistently in burial contexts in all southern plains groups. In the Antelope Creek phase 61% of burials contain artifacts from non-local sources. Half of these burials are of juveniles while the other half are associated with adult males. This is in contrast to what Lintz (1986) found in his dissertation where females were more likely to be interred with non-locally made materials. From this he tentatively suggested a possible matrilineal line of descent (Lintz 1986:174). This is likely due to reliance on field reports of sex for several sites such as Antelope Creek 22/22A and Alibates 28. After his study was concluded the remains from these sites were analyzed while at the Panhandle Plains Historical Museum by physical anthropologists such as A.J. Taylor and Douglas Owsley. The result of this was several individuals were reassigned sex in the course of analysis.

In the Washita River phase juvenile burials are the most common burials associated with trade artifacts. Six of the nine burials with non-locally produced artifacts

are from juvenile burials. Three adult females and one adult male also contain trade artifacts. However, trade items are less common in the Washita River phase with only 32% of burials with grave goods containing non-local items.

The Buried City complex is less well documented. The A180 site of nine adult individuals contains both locally and non-local artifacts. 13 burials did have clearly associated artifacts. In these burials adult male and females were both interred with non-local items. Juveniles were only interred with non-local items when also buried with an adult.

The Henrietta complex data on grave goods comes only from the Dillard site as the Harrell site did not have clear enough data to associate artifacts to any specific burial. The Dillard site represents mostly non-local items in burial contexts as seven of nine burials with grave goods contained non-local goods. Of these two were juvenile burials, three adult male burials, and two with adult female burials.

The Zimms complex has the smallest sample. Only four burials had grave goods associated with them and two of those contained non local items. One of these burials was that of a child and the other was an adult female.

Trade in the southern plains increased from the early to late prehistoric (Vehik 2002). Trade also increased throughout the late prehistoric and became increasingly important to the groups living there (Lintz 1986; Vehik 2002). While Lintz theorized from his study that females were much more likely to be associated with trade items, a reexamination of the remains has reversed this hypothesis. In the case of the other plains groups both males and females were associated with items acquired by trade. Juveniles make up a significant amount of burials with non-locally made items. In fact

the burials with the most elaborate and extensive amount of grave goods are those of juveniles.

Overall, the majority of graves do not have any grave goods associated with them. The majority of the graves that do have associated artifacts contain relatively few items that are locally made and easily replaced. Lintz drew parallels to ethnographic information of the later plains tribe the Wichita, where an individual was often buried in their best cloths and sometimes with some of their personal items (1986:174). Items acquired in trade however, require significant effort to attain and when interred with the dead reflect a loss of the labor used to acquire them. When these items are interred with juveniles who did not participate in economic activities they are reflective of an ascribed status. Juveniles interred with an extensive amount of these materials is tentatively suggestive that the members of the community who buried the juvenile had access to significant amounts of these items. They reflect a huge loss in wealth and the labor expended to acquire them. Could this be representative of certain lineages having differential access to trade? As trade increased in the late prehistoric did certain individuals establish themselves as traders? Or did plains groups have some form of social ranking and organization to handle trade relationships? There is evidence that Antelope Creek settlements late in the phase started to concentrate around the Alibates flint quarry (Lintz 1986). Alibates flint was a desired stone that shows up at neighboring cultural settlements (Lintz 1986). The current state of the archaeological sample of mortuary contexts cannot answer this question.

Footprint in Relation to Antelope Creek

The footprint site represents a conundrum. The burial pattern observed at footprint is unlike that observed at other Antelope Creek sites. The use of three burial pits as opposed to single, primary burials is unusual. There have been various interpretations of what the site represents with violence being the primary interpretation (Green 19567; Patterson 1975; Lintz 1986; Vehik 2002). The evidence of burning of the structure, pile of skulls in the fill, disarticulated remains around the floor of the structure, and a skull with articulating vertebrae with a knife underneath (Green 1967) have contributed to this interpretation.

However, ongoing new analysis of the remains has cast doubt in this (Moore-Jansen et al. 2011). Analysis of the patterning of the burned skeletal material suggests a more accidental interpretation (Davis 2012). Furthermore, there is very little incidence of trauma on the bone (Moore-Jansen et al. 2011). So what happened at footprint and how does the mortuary pattern fit in with Antelope Creek? While the burial pits with multiple individuals is unusual, the bodies and associated grave goods inside the pits fit the overall mortuary pattern in Antelope Creek. Burials were often in flexed positions and stone slabs were used in covering the burial pits (Green 1967). Artifacts found in the pit are similar to those found in other Antelope Creek graves. Further interpretation is difficult because several field observations during excavation were missed so the context of these burials and of the remains found in the fill of the room cannot be accurately assessed. The research is ongoing however, and further analysis may allow for reconstruction of the site and a reconciliation of the comingled remains to the individuals identified in the original 1967 report.

Future Research

There are many questions still unanswered in regards to the southern plains village cultures. Mortuary data if it becomes available can be a useful addition to answer some pressing questions. Mortuary data can contribute to answering questions such as temporal and spatial variation within these groups of people. Lintz in his 1986 dissertation divided the Antelope Creek phase into an early and late subphase. Similarly the Washita River phase sees some differences between early and late periods (Brooks 1994). Additionally there is variation within the Washita River phase between the eastern sites and the western sites. Mortuary data if collected from well dated contexts can potentially give clues to if these groups held shared cultural beliefs about the dead or if differences in mortuary treatment suggests a division such as been suggested (Drass 1997; 1999). The Zimms complex is also only known from a few sites. It has traits similar to both the antelope creek phase and the Washita River phase (Flynn 1986) but shows mortuary treatment not seen in either group. The Henrietta complex remains poorly documented as well and more excavations are needed to better understand it.

Finally, trade relationships within the southern plains and with their immediate neighbors is a pressing question. Mortuary data can contribute to our knowledge of the sociopolitical organization of the southern plains villagers to investigate how this interaction was handled. Did southern plains groups have some forms of ranking with certain lineages controlling trade? The data in this thesis would suggest that certain families might have had more accumulation of trade wares to bury with their dead than others. Overall, if any of these questions are to be answered more data is needed to

support this hypothesis. As of right now the numbers of individuals recovered from burial contexts are too low for any concrete conclusions. More work in the future is needed before any firm statement can be made on the nature of mortuary variability among the late prehistoric southern plains villagers and what that data can tell us about the lives of the living population.

BIBLIOGRAPHY

BIBIOLOGRAPHY

- Albrecht FJ. 1994. Osteological Analysis of Human Skeletons from the Dillard Site. *Bulletin of the Texas Archaeological Society* 62:201-218.
- Baker EM and Baker JA. 1939. Third Quarterly Report (1939) West Texas State College – WPA Archaeological Project. Manuscript on File at the Panhandle Plains Historical Museum, Canyon, Texas.
- Baker EM and Baker JA. 1941. Final Report Archaeological Survey – O.P. 665-66-3-404, State Application 30976. Unpublished Manuscript on file at the Panhandle Plains Historical Museum, Canyon, Texas.
- Bell RE. 1984. The Plains Villagers: The Washita River. Pp 307-324 in *Prehistory of Oklahoma*. Edited by R.E. Bell. New York: Academic Press.
- Bell RE and Baerreis DA. 1951. A Survey of Oklahoma Archaeology. *Bulletin of the Texas Archaeological and Paleontological Society* 22:7-100.
- Binford LR. 1972. *An Archaeological Perspective*. New York: Seminar Press.
1980. Willow Smoke and Dog's Tails: Hunter Gatherer Settlement Systems and Archaeological Site Formation Processes. *American Antiquity* 45:4-20.
- Boyd DK. 1997. Caprock Canyonlands Archeology : a Synthesis of the Late Prehistory and history of Lake Alan Henry and the Texas Panhandle-Plains. Prewitt and Associates. Austin, Texas.
2008. Prehistoric Agriculture on the Canadian River of the Texas Panhandle: New Insights from West Pasture Sites on the M-Cross Ranch. *Plains Anthropologist* 53:33-57.
- Brooks RL. 1987. The Arthur Site: Settlement and Subsistence Structure at a Washita River Phase Village. *Oklahoma Anthropological Survey, Studies in Oklahoma's Past* 15.
1989. Village Farming Societies. In *From Clovis to Comanchero: Archaeology Overview of the Southern Great Plains*. Fayetteville: Arkansas Archaeological Survey.
1994. Southern Plains Cultural Complexes. In *Skeletal Biology in the Great Plains: Migration, Warfare, Health, and Subsistence*. Edited by Douglas Owsley and Richard Jantz. Washington D.C.: Smithsonian Institution Press.
2004. From Stone Slab Architecture to Abandonment. In *Prehistory of Texas*. Edited by Timothy Perttula. College Station: Texas A&M University Press.

- Brooks RL and Bell RE. 1989. The Last Prehistoric People: The Southern Plains Villagers. *The Chronicles of Oklahoma* 67(3):296-319.
- Brooks RL, Moore MC, and Owsley D. 1991. New Smith, 34RM400: A Plains Village Mortuary Site in Western Oklahoma. *Plains Anthropologist* 37:59-78.
- Brosouske SD. 2004. Obsidian Procurement and Distribution During the Middle Ceramic Period of the Southern High Plains: Evidence for the Emergence of Regional Trade Centers. *Council of Texas Archaeologists Newsletter* 28:16-28.
- Brown JA. 1971. Dimensions of Status in the Burials at Spiro. In *Approaches to the Social Dimensions of Mortuary Practices*. Edited by JA Brown. *Memoirs of the Society for American Archaeology* 25:92-112.
- Brues AM. 1962. Skeletal Material from the McLemore site. *Bulletin of the Oklahoma Anthropological Society* 10:69-78.
1963. Skeletal Material from the Fred Loomis Site. *Bulletin of the Oklahoma Anthropological Society* 11:128.
- 1965a. Skeletal Material from site CU-27. *Bulletin of the Oklahoma Anthropological Society* 13:127-128.
- 1965b. Skeletal Material from site WD-2. *Bulletin of the Oklahoma Anthropological Society* 13:145.
- Couzzourt J and Schmidt-Couzzourt BA. 1996. The 1969 Texas Archaeological Society Field School at Blue Creek, Moore County, in the Texas Panhandle. *Bulletin of the Texas Archaeological Society* 67:1-115.
- Davis I. 2012. A study of archaeological human skeletal remains from site 41pt25 in West Texas. Unpublished Masters thesis: Wichita State University.
- Dembieki D. 1987. Laboratory Analysis of Human Skeletal Remains from Burials 1, 2, 4, 5. Report Submitted to David T. Hughes. Department of Anthropology, Wichita State University, Wichita.
- Drass RR. 1997. Culture Change on the Eastern Margins of the Southern Plains. *Oklahoma Anthropological Society Memoir* 7. *Studies in Oklahoma's Past* 19. Oklahoma Archaeological Survey. University of Oklahoma, Norman.
1998. The Southern Plains Villagers. Pp 415-456 in *Archaeology on the Great Plains*, Edited by WR Wood. University Press of Kansas, Lawrence.
1999. Redefining plains village complexes in Oklahoma: The Paoli phase and the Redbed Plains Variant. *Plains Anthropologist* 44:121-140.
- Drass RR and Swenson FE. 1986. Variation in the Washita River Phase of Central and Western Oklahoma. *Plains Anthropologist* 31:35-50.

- Drass RR and Turner CL. 1989. An Archaeological Reconnaissance of the Wolf Creek Drainage Basin Ellis County, Oklahoma. Oklahoma Archaeological Survey, Archaeological Resources Survey Report 35.
- Drass RR, Baugh TG, Flynn P. 1987. The Heerwald Site and Early Plains Village Adaptations in the Southern Plains. *North American Archaeologist* 8:151-190.
- Duffield LF. 1970. Some Panhandle Aspect Sites in Texas: Their Vertebrates and Paleoecology. Unpublished Ph.D. Dissertation, Department of Anthropology, University of Wisconsin, Madison.
- Everly TL. 1907. The Buried City of the Panhandle. *Transactions of the Kansas Academy of Science* 21(1):219-228.
1912. The Buried City of the Panhandle. *The Archaeological Bulletin* 3:1-5.
- Flynn P. 1984. An Analysis of the 1973 Test Excavations at the Zimms Site (34RM72), Pp. 215-290 in *Archaeology of the Mixed Grass Prairie, Phase I: Quartermaster Creek*. Edited by TG Baugh. Oklahoma Archaeological Survey, Archaeological Resources Survey Report 20.
1986. Analysis of Test Excavations at the Zimms Site (34RM72), Western Oklahoma. In *Current Trends in Southern Plains Archaeology*. Edited by Timothy Baugh. *Plains Anthropologist Memoir* 21:129-140.
- Green FE. 1967. Archaeological Salvage in the Sanford Reservoir Area. National Park Service Report No. 14-10-0333-1126. Alibates National Monument, Texas
- Hofman JL. 1978. The Development and Northern Relationships of the Archaeological Phases in the Southern Plains Subarea. Pp 6-35 in *the Central Plains Tradition: Internal Development and External Relationships*. Edited by D Blakeslee. University of Iowa Office of the Iowa State Archaeologist, Archeological Report 11.
- Holden WC. 1929. Some Explorations and Excavations in Northwest Texas. *Bulletin of the Texas Archaeological and Paleontological Society* 1:23-35.
1930. The Canadian Valley Expedition of March, 1930. *Bulletin of the Texas Archaeological and Paleontological Society* 2:21-32.
1932. Recent Archaeological Discoveries in the Texas Panhandle. *Southwestern Social Science Quarterly* 13:289-293.
1933. Excavations at Saddleback Ruin. *Bulletin of the Texas Archaeological and Paleontological Society* 5:39-52.
- Hughes DT. 1986. The Courson Archaeological Project. Paper presented at the Annual Meeting of the Texas Archaeological Society, Lardeo.

1991. Investigations of the Buried City, Ochiltree County, Texas: With an Emphasis on the Texas Archaeological Society Field Schools of 1987 and 1988. *Bulletin of the Texas Archaeological Society* 60:107-148.
- Hughes DT and Hughes-Jones AA. 1987. *The Courson Archaeological Projects, 1985 and 1986*. Perryton: Innovative Publishing.
- Hughes JT. 1942. *An Archaeological Report on the Harrell Site of North-Central Texas*. Master's Thesis, Department of Anthropology, University of Texas, Austin.
1955. Field Trip Notes on file at the Panhandle Plains Historical Museum, Canyon, Texas.
1957. Field Trip Notes on file at the Panhandle Plains Historical Museum, Canyon, Texas.
1962. Field Trip Notes on file at the Panhandle Plains Historical Museum, Canyon, Texas.
1968. *Prehistory of Caddoan-speaking Tribes*. PhD dissertation, Department of Anthropology, Columbia University, New York.
- Kay County Chapter of the Oklahoma Anthropological Society. 1963. *The Fred Loomis Site, A Small Group Burial Near Freedom, Oklahoma*. *Bulletin of the Oklahoma Anthropological Society* 11:123-133.
- Krieger AD. 1946. *Cultural Complexes and Chronology in Northern Texas*. University of Texas Publication 4640. Austin, Texas.
- Lintz C. 1986. *Architecture and Community Variability in the Antelope Creek Phase*. Oklahoma Archaeological Survey, *Studies in Oklahoma's Past* 14.
- Lorrain D. 1967. *The Glass Site*. Pp 24-44 in *A Pilot Study of Wichita Indian Archaeology and Ethnohistory* Edited by RE Bell, B Jelks, and WW Newcomb. Final Report Submitted to the National Science Foundation.
- Lopez DR. 1970. *The McLemore Cemetery Complex: An Analysis of Prehistoric Burial Customs* *Bulletin of the Oklahoma Anthropological Society* 19:137-151.
- Lowie RH. 1954. *Indians of the Plains*. Lincoln: University of Nebraska Press.
- Lowrey EJ. 1932. *The Archaeology of the Antelope Creek Ruins*. Master's Thesis, Department of Anthropology, Texas Tech University, Lubbock, Texas.
- Martin ER. 1994. *The Dillard Site: A Late Prehistoric Plains Village Site in Cooke County, Texas*. *Bulletin of the Texas Archaeological Society* 62:105-200.
- Mckern WC. 1939. *The Midwest Taxonomic Method as an Aid to Archaeological Study*. *American Antiquity* 4(4):301-313.

- McWilliams KR and Johnson JL. 1979. Physical Evidence on the origins of the Panhandle Aspect People. *Plains Anthropologist* 24:249-253.
- Moore MC. 1984. A Reconnaissance of Quartermaster Creek. Pp 51-214 in *Archaeology of the Mixed Grass Prairie Phase I: Quartermaster Creek*. Edited by TG Baugh. Oklahoma Archaeological Survey, Archaeological Resources Survey Report 20.
- Moore-Jansen PH. 1991. The Courson Ranch Site Burials: A study of Four Human Skeletons from the 1990 Excavation Season at Harold's Pivot Field Site and Buried City, Perryton, Texas. Report Submitted to David Hughes, Courson Archaeological Projects. Department of Anthropology, Wichita State University, Wichita.
- Moore-Jansen PH. with Davis I and Ackerman KJ. 2011. Investigations and Continuing Analysis of the Human Skeletal Remains from the Footprint Site (41PT25), An Archaeological Manifestation of the Antelope Creek Phase in West Texas. Draft. Submitted to the Panhandle-Plains Historical Museum and the National Park Service
- Moorehead WK. 1921. *Recent Explorations in Northwestern Texas*. *American Anthropologist* 23:1-111.
1931. *Archaeology of the Arkansas River Valley*. Phillips Academy. Andover, Massachusetts.
- O'Shea JM. 1984. *Mortuary Variability: an Archaeological Investigation*. Orlando: Academic Press.
- O'Shea JM and Zvelebil M. 1984. Reconstructing the Social and Economic Organization of Prehistoric Foragers in Northern Russia. *Journal of Archaeological Anthropology* 3:1-40.
- Owsley DW. 1989. This History of Bioarchaeological Research in the Southern Great Plains. In *From Clovis to Comanchero: Archaeological Overview of the Southern Great Plains Fayetteville: Arkansas Archaeological Survey*.
- Owsley DW, Marks MK, Manhein, MH. 1989. Human Skeletal Samples in the Southern Great Plains. In *From Clovis to Comanchero: Archaseological Overview of the Southern Great Plains*. Fayetteville: Arkansas Archaeological Survey.
- Owsley DW. N.D. Unpublished osteological reports on human skeletal remains from the Texas Panhandle. Reports on file at the Panhandle Plains Historical Museum.
- Patterson DE. 1974. *Dental Variation among Panhandle Aspect Populations*. Master's thesis, Department of Anthropology, Eastern New Mexico University, Portales.
- Patterson DK. 1975. *An Analysis of Human Skeletal Material from the Antelope Creek Focus Sites of Northern Texas*. Master's thesis, Department of Anthropology, Eastern New Mexico University, Portales.

- Pearson MP. 1999. *The Archaeology of Death and Burial*. College Station: Texas A&M University Press.
- Peebles C. 1971. Moundville and Surrounding Sites: Some Structural Considerations of Mortuary Practices. In *Approaches to the Social Dimensions of Mortuary Practices*. Edited by J.A. Brown. *Memoirs of the Society for American Archaeology* 25:69-91.
- Pillaert, E. 1963. The McLemore Site of the Washita River Focus. *Bulletin of the Oklahoma Anthropological Society* 11:1-113.
- Prikryl DJ. 1990. Lower Elm Fork Prehistory of the Lower Elm Fork of the Trinity River. Master's Thesis, University of Texas, Austin.
- Ray CN. 1931. Recent Archaeological Researches in the Abilene Section. *Bulletin of the Texas Archaeological and Paleontological Society* 3:76-89.
1933. Multiple Burials in Stone Cist Mounds of the Abilene Region. *Bulletin of the Texas Archaeological and Paleontological Society* 5:14-24.
1937. More Evidence Concerning Abilene Man. *Bulletin of the Texas Archaeological and Paleontological Society* 9:193-221.
1939. Some Unusual Abilene Region Burials. *Bulletin of the Texas Archaeological and Paleontological Society* 11:226-285.
- Richards MK. 1971. The Lee Site, A Late Prehistoric Manifestation in Garvin County, Oklahoma. *Bulletin of the Oklahoma Anthropological Society* 20:1-82.
- Saxe A. 1970. *Social Dimensions of Mortuary Practices*. PhD Dissertation, University of Michigan, Ann Arbor: University Microfilms.
- Shaeffer JB. 1965. Salvage Archaeology in Oklahoma, Vol I. Papers of the Oklahoma Archaeological Salvage Project. *Bulletin of the Oklahoma Anthropological Society* 13:77-151.
1966. Salvage Archaeology in Oklahoma, Vol II. Papers of the Oklahoma Archaeological Salvage Project. *Bulletin of the Oklahoma Anthropological Society* 14:1-86.
- Sharrock FW. 1961. The Grant Site of the Washita River Focus. *Bulletin of the Oklahoma Anthropological Society* 9:1-66.
- Studer FV. 1931a. Some Field Notes and Observations Concerning Texas Panhandle Ruins. In *Archaeology of the Arkansas River Valley*, Edited by WK Moorehead. Andover, Massachusetts.
- 1931b. Archaeological Survey of the North Panhandle of Texas. *Bulletin of the Texas Archaeological and Paleontological Society* 3:70-75.

1934. Texas Panhandle Culture Ruin No. 55. Bulletin of the Texas Archaeological and Paleontological Society 6:80-96.
- Summers D. 1997. Native American Burials: the Texas Panhandle. Master's Thesis, Department of Anthropology Texas Tech University, Lubbock, Texas.
- Tainter J. 1977. Modeling Change in Prehistoric Social Systems. In For Theory Building in Archaeology. Edited by Lewis Binford. New York: Academic Press. Pp 327-351.
- Taylor AJ. 1996. NAGPRA Notes Regarding NPS Human Remains and Funerary Objects Curated at PPHM. Notes on file at the Panhandle Plains Historical Museum.
- Vehik SC. 2002. Conflict, Trade, and Political Development on the Southern Plains. American Antiquity 67:37-64.
- Wallis CS. 1984. Summary of Notes and Earlier Analysis of the Wickham #3 Site, 34RM-29, Roger Mills County, Oklahoma. Bulletin of the Oklahoma Anthropological Society 33:1-29.
- Wedel W. 1959. The Kansas Bureau of American Ethnology Bulletin 174.
- Willems W. 1978. Burial Analysis: A New Approach to an Old Problem. Ber Rijkdienst Oudheidkundig Bodemonderzoek 28:81-98.